



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

LL

KF 27

.A3

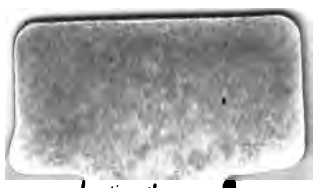
1921

ser. K

Copy 1

ser. K





FORESTRY

HEARINGS

BEFORE THE

COMMITTEE ON AGRICULTURE

U.S. Congress HOUSE OF REPRESENTATIVES

SIXTY-SEVENTH CONGRESS

SECOND SESSION

JANUARY 9, 10, 11, 12, 1922

Serial K



WASHINGTON
GOVERNMENT PRINTING OFFICE

1922

Chapman

COMMITTEE ON AGRICULTURE.

HOUSE OF REPRESENTATIVES.

SIXTY-SEVENTH CONGRESS.

GILBERT N. HAUGEN, Iowa, *Chairman*.

JAMES C. McLAUGHLIN, Michigan.
CHARLES B. WARD, New York.
FRED S. PURNELL, Indiana.
EDWARD VOIGT, Wisconsin.
MELVIN O. McLAUGHLIN, Nebraska.
CARL W. RIDDICK, Montana.
J. N. TINCHER, Kansas.
THOMAS S. WILLIAMS, Illinois.
JAMES H. SINCLAIR, North Dakota.
EDW. D. HAYS, Missouri.
CHARLES J. THOMPSON, Ohio.
FRED B. GERNERD, Pennsylvania.
FRANK CLAGUE, Minnesota.
JOHN D. CLARKE, New York.

HENCE JACOWAY, Arkansas.
JOHN W. RAINEY, Illinois.
JAMES B. ASWELL, Louisiana.
DAVID H. KINCHELOE, Kentucky.
MARVIN JONES, Texas.
PETER G. TEN EYCK, New York.

L. G. HAUGEN, *C'erk*.

LIBRARY OF CONGRESS

JAN 16 1937

DIVISION OF DOCUMENTS

And 19937

H 1753
19937
4th st

CONTENTS.

Statement of—	Page.
Hon. Bertrand H. Snell	8, 266
Hon. William B. Greeley	12, 49
George S. Long	31
Alfred Gaskill	55
Philip W. Ayres	60, 68
Ray E. Danager	62
J. W. Toumey	89
Henry C. Campbell	99
William A. Babbitt	108
George W. Sisson, jr.	120
E. A. Sherman	133, 264
Elbert H. Baker	145
W. L. Hall	146
Huntington Taylor	173, 186
Mr. Bennett	183
Charles Lathrop Pack	190
Gifford Pinchot	192
Col. Joseph Hyde Pratt	218
Henry S. Graves	221
John H. Kirby	230
R. S. Kellogg	240, 246, 253
Samuel T. Dana	242
A. L. Osborn	244
C. Marshall Taylor	245
Union League Club of Chicago	246
E. T. Allen	247
Hon. Henry E. Hardtner	261

Serial R

FORESTRY.

COMMITTEE ON AGRICULTURE,
HOUSE OF REPRESENTATIVES,
Monday, January 9, 1922.

The committee met at 10 o'clock a. m., Hon. Gilbert N. Haugen (chairman) presiding.

There were present: Mr. Haugen (chairman), Mr. McLaughlin of Michigan, Mr. Voigt, Mr. Tincher, Mr. Sinclair, Mr. Thompson, Mr. Gerner, Mr. Clague, Mr. Clarke, Mr. Aswell, Mr. Kincheloe, and Mr. Jones.

The CHAIRMAN. The committee will be in order. The committee has met this morning to give consideration to H. R. 129, which is a bill to provide, through cooperation between the Federal Government, the States, and owners of timberlands, for adequate protection against forest fires, for reforestation of denuded lands, and so on, introduced by Mr. Snell. Without objection, the bill will be incorporated in the record.

(The bill is as follows:)

[H. R. 129. Sixty-seventh Congress, first session.]

A BILL To provide through cooperation between the Federal Government, the States, and owners of timberlands for adequate protection against forest fires, for reforestation of denuded lands, for obtaining essential information in regard to timber and timberlands, for extension of the national forests, and for other purposes, all essential to continuous forest production on lands entirely suitable therefor.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture, through the Forest Service, is hereby authorized and directed, in cooperation with appropriate officials of the various States or other suitable agencies, to recommend for each forest region of the United States the essential requirements in protecting timbered and cutover lands from fire, in reforesting denuded lands, and, where and to the extent necessary, in the cutting and removing of timber crops by such methods as will promote continuous production of timber on lands chiefly suitable therefor; and the Secretary of Agriculture is further authorized, on such conditions as he may determine to be fair and reasonable in each State, to cooperate with the various States and through them with private and other agencies within the States in bringing into effect such essential requirements favorable for forest protection and renewal with a view to furnish a continuous supply of timber for the use and necessities of the people of the United States. There is hereby authorized to be appropriated annually, out of any money in the Treasury not otherwise appropriated, \$1,000,000, to enable the Secretary of Agriculture to carry out the provisions of sections 1 and 2 of this Act.

SEC. 2. That in no case other than for preliminary investigations shall the amount expended by the Federal Government in any State during any fiscal year under the foregoing section exceed the amount expended by the State for the same purposes during the same fiscal year, including the expenditures of forest owners required by State law, and the Secretary of Agriculture is authorized to withhold cooperation, in whole or in part, from States which do not comply in legislation or in administrative practice with such requirements as shall be established in accordance with section 1 of this act. In the cooperation extended to the several States due consideration shall be given to the protection of the watersheds of navigable streams, but such cooperation may, in the discretion of the Secretary of Agriculture, be extended to any forest lands within the cooperating States.

SEC. 3. That the Secretary of Agriculture, through the Forest Service and in cooperation with the various States, organizations of timber users, owners of timber lands, and other agencies, is hereby authorized and directed to make a survey of the forest resources of the United States to determine the quantity, location, availability, and suitability for various uses of each class or species of timber; to determine the approximate area, location, condition, and productive capacity of the land chiefly valuable for timber growth and not required for other purposes; to ascertain the yearly requirements as to kinds and quantities of timber of each State and important wood-

using industry: and to obtain such related information as in the judgment of the Secretary of Agriculture may be necessary to carry out the provisions of this Act. There is hereby authorized to be appropriated out of any money in the Treasury not otherwise appropriated, \$3,000,000, to be made available at such times and in such amounts as may be required and recommended by the Secretary of Agriculture for carrying out the purposes of this section.

SEC. 4. That there is hereby authorized to be appropriated annually, out of any money in the Treasury not otherwise appropriated, the sum of \$1,000,000, to enable the Secretary of Agriculture to conduct experiments and investigations in reforestation and methods of cutting and utilizing timber, to establish forest experiment stations, and to conduct experiments, investigations, and tests in the chemical, physical and mechanical properties and utilization of native and foreign woods and other forest products, including timber tests, wood preservation, tests of wood, and other fibrous materials for pulp and paper making, and commercial demonstrations of improved materials, methods and processes, and such other tests and investigations as in the judgment of the Secretary of Agriculture shall be desirable to promote the most effective use of forest products in the United States. The investigations, experiments, tests, and demonstrations provided for by this section may be conducted independently, or in cooperation with other branches of the Federal Government, with State, county, and municipal agencies, educational institutions, business organizations, and individuals; and authority is hereby granted the Secretary of Agriculture to receive money contributions, under such conditions as he may impose, from co-operators, which contributions shall be covered into the Treasury and shall constitute a special fund, which is hereby appropriated and made available until expended, for the payment of the contributor's share of the expenses of conducting any such investigation, experiment, or test, and for refunding to contributors amounts contributed by them in excess of their share of said expenses: *Provided*, That the Secretary of Agriculture shall expend such portions of the appropriations authorized by this section as he deems necessary to study the effects of tax methods and practices upon forest perpetuation, to devise tax laws designed to encourage the conservation and growing of timber, to cooperate with State agencies in the consideration of such laws, and to investigate and promote practicable methods of insuring standing timber or growing forests from losses by fire and other causes.

SEC. 5. That there is hereby authorized to be appropriated annually, out of any money in the Treasury not otherwise appropriated, the sum of \$1,000,000, to enable the Secretary of Agriculture to purchase or otherwise obtain forest-tree seed and nursery stock, to establish and maintain forest nurseries in the national forests, to sow and plant denuded lands within the national forests with forest trees, and to conduct necessary experiments and investigations in connection with such sowing and planting, including all necessary expenses incident thereto.

SEC. 6. That there is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$50,000,000, to be made available at such times and in such amounts as may be required and recommended by the National Forest Reservation Commission for carrying out the purposes of the act of March 1, 1911, entitled "An act to enable any State to cooperate with any other State or States, or with the United States, for the protection of the watersheds of navigable streams, and to appoint a commission for the acquisition of lands for the purpose of conserving the navigability of navigable rivers," as amended.

SEC. 7. That the Secretary of Agriculture is hereby authorized to locate, examine, survey, and with the approval of the National Forest Reservation Commission, and at the price or prices fixed by it, to purchase lands chiefly suitable for forest production in any part of the continental United States, whether the control of such lands will promote or protect the navigation of streams on whose watersheds they lie or otherwise; and the appropriations authorized for the purchase of lands under the act of March 1, 1911, entitled "An act to enable any State to cooperate with any other State or States, or with the United States, for the protection of the watersheds of navigable streams, and to appoint a commission for the acquisition of lands for the purpose of conserving the navigability of navigable rivers," are herewith also authorized for the purposes named in this section: *Provided*, That all of the provisions of the aforesaid act of March 1, 1911, as amended, not inconsistent with the provisions of this section, shall apply to any lands so purchased.

SEC. 8. That the Secretary of the Interior be, and hereby is, authorized to accept on behalf of the United States title to any lands within or adjacent to exterior boundaries of national forests if, in the opinion of the Secretary of Agriculture, the public interests will be benefited thereby and the lands are chiefly valuable for national forest purposes, and in exchange therefor may give not to exceed an equal value of such national forest land or timber or assignable certificates for timber within the national forests as

may be determined by the Secretary of Agriculture and accepted by the owner as fair compensation, consideration being given to any reservations which either the grantor or the Government may make of timber, minerals, or easements. Such assignable certificates for timber shall be issued under the authority of the Secretary of Agriculture, shall be for the agreed values of the lands acquired, and shall be accepted at their face value, when accompanying bids, for the purchase of national forest timber or in payment for national forest timber purchased under existing laws and regulations. Any timber given under such exchanges shall be cut and removed under the direction and supervision and in accordance with the requirements of the Secretary of Agriculture. Lands conveyed to the United States under this section shall, upon acceptance of title, become parts of such national forests as the Secretary of Agriculture shall designate: *Provided*, That the Secretary of the Interior shall report to Congress annually the quantities of such land exchanges as are consummated and the names of the parties thereto.

SEC. 9. That all lands not now embraced in national forests or national parks which are owned by the United States or subject to disposition by the United States, including unreserved public land, lands covered by former patents, or grants which have reverted in the United States, and Indian reservations, and all lands of the character herein defined which may hereafter be acquired by the United States, with the exception of military, naval, lighthouse, and other special reservations, which are classified by the Secretary of Agriculture and approved by the National Forest Reservation Commission as valuable chiefly for the production of timber or protection of watersheds, shall be, and the same are hereby, withheld from all forms of entry, appropriation, or allotment, except mineral entries authorized under existing law, from and after the date of the filing of such classification with the Secretary of the Interior; and the lands so classified shall remain withdrawn from any form of entry or appropriation as aforesaid, with the exception of mineral entries authorized under existing law, until the Congress shall direct otherwise; and there is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$1,000,000, to be made available at such times and in such amounts as may be required and recommended by the Secretary of Agriculture to enable him to classify and determine the areas of the lands herein defined which are valuable chiefly for the production of timber or protection of watersheds: *Provided*, That nothing herein contained shall affect the standing of any valid claim, entry, or allotment existing on such lands as the date of their classification or the equities or rights of the claimants or entrymen thereunder.

SEC. 10. That the National Forest Reservation Commission created pursuant to the act of March 1, 1911, is hereby authorized and directed to recommend to the President of the United States the incorporation in national forests of any lands classified as valuable chiefly for the production of timber or protection of watersheds and withdrawn from entry under the preceding section, which, in the judgment of said commission, are adapted to national forest purposes. Said commission is further authorized to determine the value of any lands so withdrawn which are the property of Indian tribes, and to make recommendations to Congress for the purchase of such lands or otherwise for the liquidation of the equities of such Indian tribes therein.

SEC. 11. That the President of the United States is hereby authorized, in his discretion, upon recommendation of the National Forest Reservation Commission, to incorporate in national forests, now existing or which the President by Executive proclamation may create, any lands classified and withdrawn as defined in section 9 herein; but the addition to any national forest of such lands shall not affect any valid claims, entries, or allotments existing at the date of their withdrawal, and to the rights, equities, or title of any Indian tribes: *Provided*, That the President may, in his discretion, incorporate in national forests all or any portion of military, naval, or other special reservations, not including national parks, or any lands acquired by the United States through gift, bequest, or otherwise which are chiefly valuable for the production of timber or protection of watersheds under such regulations or conditions as he deems wise with respect to the use of such lands for military, naval, or other purposes: *Provided further*, That is it the intent and purpose of this act that, should any part thereof fail because of ambiguity or other reason, such failure shall not be construed as adversely affecting the remaining parts.

The CHAIRMAN. What is your pleasure? Mr. Snell, what arrangements have you, if any, as to the time to be consumed?

Mr. SNELL. As nearly as we could tell we thought we would probably take about three or four days in connection with these hearings; the proponents of the bill wanted to have at least two days to present their side of the matter, and then if there is any opposition that want to be heard at this time, we wanted to give them a day for that, and then we would like to have another day to put in our rebuttal evidence.

Mr. ASWELL. Is there any opposition?

Mr. SNELL. There usually is opposition to every bill that is introduced in Congress, and, therefore, I am taking it for granted that there will be opposition to this bill.

The CHAIRMAN. Your proposition is that it will take about four days?

Mr. SNELL. I should say so: yes, Mr. Chairman.

The CHAIRMAN. Two days for the proponents?

Mr. SNELL. Yes.

The CHAIRMAN. And two days for the opponents?

Mr. SNELL. I suggested one day for the opposition and one day for our rebuttal.

Mr. TINCHER. We know of one opposition your bill has, and if there is any other opposition it would be unfair to the other opposition to limit the opposition to one day, because that might not be sufficient time. We know that if certain opposition comes before the committee it will take at least a day.

Mr. SNELL. We intend to have a free, open, and fair discussion of this general proposition. We want to lay our cards on the table, and we expect to present our side of the case, and hope something will be evolved out of this hearing that will be beneficial. Now, that is my general suggestion in connection with the hearings.

Mr. TINCHER. I think this is one of the most important propositions that is before the committee; perhaps it will be classed as the important proposition for this session of the Congress, and I think, in fairness to the committee, if we report out any legislation—perhaps I am in the uninformed part of the committee—but if we report out any legislation, we should go into it very thoroughly. When you came before the committee about a year ago and discussed this matter with the committee, I was surprised at the fullness of my lack of information on the subject. I do not think there should be any serious limitation to anybody that has anything of benefit to the committee to say on the proposition.

Mr. SNELL. I will say for the benefit of the committee that we have men here from every part of the country, representing practically every phase of the industry, and men who represent all phases of the forestry proposition. They are here to give you the benefit of their information, and they desire to discuss it openly and aboveboard, and to discuss any proposition with any member of the committee that may desire to interrogate them.

The CHAIRMAN. Is there any person here in opposition to the bill that has any suggestion to make as to the time that should be consumed? [After a pause, in which there was no response.] Are there any suggestions, then, as to the procedure?

Mr. CLARKE. I suggest, Mr. Chairman, that we proceed as rapidly as possible with the hearing of the proponents of the bill, and then when the time comes, if there is any opposition that desires to be heard, that we take up the matter and give them such time as is required.

The CHAIRMAN. Very well; without objection, that shall be done. Mr. Snell, we will be pleased now to hear from you.

STATEMENT OF HON. BERTRAND H. SNELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK.

Mr. SNELL. Mr. Chairman and gentlemen of the committee, we are here this morning as the proponents of H. R. 129, commonly known as the "Snell forestry bill."

For a great many years the people of this country have appreciated the fact that we needed some comprehensive substantive legislation along this line for the purpose of protecting the standing timber and also guaranteeing within our own country a supply for the future generations of our own people.

Now, just a few words about the general history of this legislation up to the present time.

Col. Graves, formerly Chief Forester of the United States and probably one of the best-informed men in this country on the needs of legislation of this character, is probably more responsible for the general features of this bill than any other one man.

Mr. CLARKE. Is he now here?

Mr. SNELL. I understand that Col. Graves is in the city and is willing to come before the committee to give any information that is desired, provided he is requested to do so by the chairman or any member of the committee.

The CHAIRMAN. What is the pleasure of the committee?

Mr. ASWELL. I would like to hear Col. Graves on the subject.

Mr. CLARKE. I should certainly like to hear him on the subject also.

Mr. ASWELL. I move you, Mr. Chairman, that we invite Col. Graves to appear before the committee.

(The motion was duly seconded and carried.)

The CHAIRMAN. It has also been suggested that we invite Prof. Toumey, of Yale University.

Mr. KELLOGG. He is the dean of the school of forestry of Yale University.

The CHAIRMAN. Yes; it has been suggested that he be invited to appear before the committee.

Mr. KELLOGG. Mr. Toumey has written to me that he will be here to-morrow morning.

Mr. TINCER. Of course, I suppose we do not have to issue an invitation to our present Chief Forester, Col. Greeley, to be here before the committee on this subject.

Mr. SNELL. I will say, Mr. Chairman and gentlemen, that Col. Greeley is here and we expect to put him on as the first witness, for the purpose of explaining the need of general comprehensive legislation of this character at this time.

Mr. McLAUGHLIN of Michigan. At the former hearing by the committee on this subject Mr. Greeley appeared and made quite a comprehensive statement, which was taken down by a stenographer and is now in print. It would not be necessary for him to repeat that statement, I assume.

Mr. SNELL. No; but there are several new members of the committee, and we desire him to make a statement explaining the general provisions of this bill at this time.

Mr. ASWELL. Mr. Chairman, we have in Louisiana a gentleman who has donated 30,000 acres of land of his own and who has been experimenting for 10 years on re-foresting; and we have about 5,000,000 acres of cut-over timber lands in that State, and he has done more than any other man in this country on that question. I wonder whether it would be advisable to invite him to appear before the committee? It would take him about three days to get here. He knows more about the practical side of it than any other man in this country, I believe.

The CHAIRMAN. What is the pleasure of the committee with reference to the matter?

Mr. ASWELL. His name is Henry Hardtner.

Mr. SNELL. I think it would be well, Mr. Chairman, to have this gentleman here, if he is a practical man.

Mr. ASWELL. He knows all about the practical side of it, Mr. Chairman.

Mr. CLARKE. I move, Mr. Chairman, that a telegram be sent him to find out whether he can come here and appear before the committee within the next four days.

The motion was duly seconded and carried.

Mr. TINCER. I suppose while we are inviting persons to appear before the committee, we should not overlook the distinguished chief forester of the State of Pennsylvania, so I move you, Mr. Chairman, that we invite Mr. Gifford Pinchot to appear before the committee.

The motion was duly seconded and carried.

Mr. SNELL. Mr. Chairman, may I make a suggestion along that line?

The CHAIRMAN. Certainly.

Mr. SNELL. While the committee is sending out the invitations, I think it would be well for the committee to invite the present Secretary of Agriculture, Mr. Wallace, in a general way to give his views about the need of some kind of legislation of this character. Not specially with reference to this bill, or any other bill, but on the general need of legislation of this character.

Mr. TINCER. It has not been customary, I think, since I have been here, to call on the Secretary, especially when the head of the bureau or department of his office has come before the committee. However, I would be glad to have Secretary Wallace to come before the committee, but we generally have him the last one.

Mr. JONES. If we are going to make a list of 15 or 20 gentlemen to send invitations to, it seems to me there should be a limit in some way. We can have those who want to come here, and then have special invitations. I do not see any need of making a list to start in with.

Mr. SNELL. Shall I proceed, Mr. Chairman?

The CHAIRMAN. You may proceed, Mr. Snell.

Mr. SNELL. This present legislation which is now before the committee is largely the result of the public addresses of Col. Graves and conferences that he held throughout the United States with various interested parties, and as a result of this work done by Col. Graves the conservation committee of the American Paper & Pulp Association requested his successor, Col. Greeley, to put his ideas in concrete form and present them to interested people for consideration. After much discussion pro and con by various people throughout the United States, the final draft of this bill, which is practically the same as it is now before you, was agreed upon by the Western Forestry & Conservation Association, the American Paper & Pulp Association, the National Lumber Manufacturers' Association, the American Forestry Association, the National

Wholesale Lumber Dealers' Association, the Association of Wood Using Industries of the United States, and the American Newspaper Publishers' Association, all users, producers, or distributors of forest products. In fact, the landowner, the producer, and the consumer, for the first time in the history of this class of legislation, agreed on the basic principles that were necessary for legislation of this kind.

Now, all these people are here at the present time, and a great many others are here in support of this legislation, and I shall hand to the reporter for the record a complete list of all of the gentlemen who appear at this hearing in support of the general principles of the bill.

(The list furnished by Mr. Snell is as follows:)

"Mr. Snell.

"W. B. Greeley, United States forester.

"Geo. S. Long, chairman forestry committee, National Lumber Manufacturers' Association.

"Alfred Gaskill, State forester of New Jersey.

"R. E. Danaher, president California White & Sugar Pine Manufacturers' Association; member California State Board of Forestry.

"A. L. Osborn, Northern Hemlock & Hardwood Manufacturers' Association.

"J. W. Toumey, dean Yale Forest School.

"Geo. W. Sisson, jr., ex-president, American Paper & Pulp Association.

"W. A. Babbitt, the Association of Wood-Using Industries.

"S. T. Dana, State forester of Maine.

"Henry C. Campbell, editor Milwaukee Journal.

"W. L. Hall, secretary Central States Forestry League.

"Philip W. Ayres, forester, Society for the Protection of the New Hampshire Forests.

"Huntington Taylor, Edward Rutledge Timber Co., Idaho.

"E. A. Sherman, associate forester, United States Forest Service.

"American Forestry Association.

"American Newspaper Publishers' Association.

"American Wood Preservers' Association.

"Union League Club, Chicago.

"E. T. Allen, forester, Western Forestry and Conservation Association.

"R. S. Kellogg, chairman National Forestry Program Committee."

Mr. SNELL. Now, the main purpose of the bill, as stated in the preamble, is "to provide through cooperation between the Federal Government, the States, and owners of timberlands for adequate protection against forest fires, for reforestation of the denuded lands, for obtaining essential information in regard to timber and timberlands, for extension of the national forests, and for other purposes, all essential to continual forest production on lands chiefly suitable therefor."

Mr. JONES. Mr. Snell, now in that connection—I have read the bill rather hurriedly this morning—it speaks of cooperation. Does it provide that the States shall expend a like amount of money which is appropriated by the Federal Government in this matter?

Mr. SNELL. It is provided and intended that they shall. Of course, that is left with the Secretary of Agriculture. It is intended that the States shall expend at least as much money as that provided in this bill.

Mr. JONES. I read the bill very hurriedly this morning and I did not find where it was required.

Mr. SNELL. That is provided in the first two sections of the bill. The Secretary of Agriculture, through the Forest Service, is authorized and directed to do these things in cooperation with the appropriate officials of the various States or other suitable agencies, etc.

Mr. JONES. With cooperative bills we had a provision that the States shall expend as large an amount as that appropriated by the Federal Government.

Mr. SNELL. You will find that provision in section 2, beginning with line 14 on page 2 of the bill, "That in no case other than for preliminary investigations shall the amount expended by the Federal Government in any State during any fiscal year under the foregoing section exceed the amount expended by the State for the same purpose during the same fiscal year." etc.

Mr. JONES. That is why I was asking the question.

Mr. SNELL. Now, I would like to explain in detail the provisions of the bill very briefly.

The first two sections are of chief importance at this time. In the main they propose a method of Federal cooperation with the States and individual landowners which, in my judgment, constitute the most effective and constitutional method of getting into operation a comprehensive national forestry policy, which outlines Fed-

eral, State, and private responsibility in the protection and management of all forest land.

The third directs a survey of forest resources and requirements necessary at an early stage to insure that steps taken under the provisions of this bill are neither inadequate nor superfluous.

The fourth deals with forest research and investigations in wood utilization, also study of forest taxation.

The fifth with reforestation of denuded lands in national forests.

The sixth and seventh with purchasing additional lands for national forests.

The eighth the acquisition of similar lands by exchange.

The remaining sections cover classification and inclusion in the national forests of permanent forest lands now in other forms of Government ownership.

This is a short synopsis of the whole bill, which is based on the general assumption and belief that it is now possible to have a mutual cooperative arrangement between Federal, State, and individual landowners governing future forest management.

Now, gentlemen of the committee, the people are interested in this legislation, and the people are desirous that there shall be placed before Congress a comprehensive, substantive plan for dealing with the forest situation.

Our bill is on the general principle of cooperation; cooperation under the leadership of the Federal Government: cooperation between the Federal Government, the State government, and the individual landowner. There is nothing new in that principle. It is the same general principle under which we are working under the Federal highway building system at this time, wherein the Federal Government lays down the general scheme or the general rules and regulations and cooperates with the States in the carrying out of that system.

Mr. CLARKE. Is there any policy now laid down by the pulp and paper people limiting the cutting down of trees on your lands in the north?

Mr. SNELL. There are a great many men in northern New York who have started a general scheme of reforestation of their own.

Mr. CLARKE. But there is no general scheme that has been adopted by the pulp and paper people?

Mr. SNELL. No; not generally. But the State of New York is trying to encourage it as much as possible, and under certain conditions they do not tax certain lands that are given over entirely to reforestation purposes.

Now, this bill, since it has been presented to Congress has received very general approval by people throughout the entire country. It is in no way sectional legislation or class legislation, but is something that is of vital interest and importance to every section and every industry in the United States; it deals with a principle that is vital to the people of the entire country, and it is our desire to do something that will preserve the timber that we have at the present time and that will insure and guarantee a future supply of commodities made of wood for our own people and within the confines of the United States.

Now, we believe that this is important enough and of such general interest that this committee will give it very full and careful consideration and its usual earnest consideration, with the result that we will get some general legislation out of it.

Now, as I said, we have several men here who are practical in every phase of this situation, and we are going to lay all of our cards on the table and tell you all we know about it, and we want to discuss fully every section and every phase of this bill, in order that we may get some beneficial results therefrom.

Mr. JONES. May I ask another question?

Mr. SNELL. Certainly.

Mr. JONES. As Mr. Tincher says, my lack of information on this subject is very great. I notice that we have been passing a number of bills recently, by the terms of which the Government has been trading forest lands for cut-over lands. I think we have passed quite a few bills of that character. Now, is that policy intended to be pursued in the event this bill is passed, that the Government shall grow this timber on its land and then trade it for the cut-over land?

Mr. SNELL. Not entirely. If you will wait until we get to that provision of the bill, we can explain it very much better. There is a provision in the bill providing for the exchange of lands. It does not give the timberlands for the denuded lands, only on a basis of a dollar's worth of timber for a dollar's worth of land.

Mr. JONES. The point I am getting at is, are we to grow timber on these lands, virgin timber, and then exchange it for the cut-over lands?

Mr. SNELL. That is not the object of the bill; it is not the intention that the Government shall give a dollar's worth of timber without getting a dollar's worth in return therefor.

Mr. TINCER. Congress never passed a bill to that effect, except where it was the unanimous opinion that the cut-over land was of equal value with that for which it was exchanged.

Mr. JONES. The discussion on the floor at least indicated that it was desired that the timber be used by the companies that were taking the timber; that the Government was going to take the cut-over lands and regrow timber on them. I take it the cut-over land was land that the timber had been cut off of by private individuals. The timber was at least worth cutting.

Mr. SNELL. I do not have in mind any such bill as you refer to, Mr. Jones.

Mr. CLARKE. I do not remember any such bill.

Mr. JONES. Where did we get this cut-over land?

Mr. SNELL. It was cut over and at the time cut off by private corporations, of course. I do not know what you have reference to.

Mr. JONES. My information is not as full on that subject as it should be. I am seeking information. I know there have been several bills that have been up in the House, and we have passed two or three such bills several months ago, by the terms of which bills the Government traded some timberland for cut-over land.

Mr. CLARKE. That was in specific cases?

Mr. JONES. In specific cases; the land was designated.

Mr. SNELL. I think if there was any tract of any considerable size, when Col. Greeley is on the stand he can give you that information. He is the Chief Forester of the United States.

With your permission, Mr. Chairman and gentlemen, I will first introduce Col. Greeley, Chief Forester of the United States, who will discuss this bill from the standpoint of the Forest Service, and the general need of comprehensive legislation along this line at the present time.

The CHAIRMAN. We will hear Col. Greeley.

STATEMENT OF HON. WILLIAM B. GREELEY, CHIEF, FOREST SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE.

Mr. GREELEY. Mr. Chairman and gentlemen, as Representative Snell has indicated, the Forest Service has had a considerable part in the preparation of this bill. In the report made by the service to Congress, in response to a resolution of the Senate requesting full information upon the timber situation of the country, we incorporated general recommendations for Federal legislation along these lines; and later I participated in the drafting of this specific measure.

The bill represents to me to-day, as it did when its outlines were first considered the most practicable solution of the timber supply situation of this country. At the same time, I wish to make it clear to the committee at the outset that I am not appearing as a proponent of this particular bill or of any particular bill, but in my capacity as head of the National Forest Service with the purpose of giving the committee all of the information and assistance that I can in drafting some form of comprehensive Federal legislation dealing with the reforestation of timberlands.

Mr. ASWELL. There is another bill or two of the same character before Congress now, is there not?

Mr. GREELEY. Yes, sir.

Mr. ASWELL. What is the other bill?

Mr. GREELEY. I presume you refer to the bill introduced by Senator Capper, which attacks the same problem in a different way.

In other words, I want to discuss the needs for Federal legislation on the reforestation of timber lands, and the forms which such legislation may take.

It may be pertinent to ask at the outset why Federal legislation dealing with timber lands is needed, and I would like to answer that question very briefly.

One-fourth of the area of the United States is forest land, which has not been devoted to agriculture or any other substantial form of use. Of this four hundred and sixty and odd million acres, 70 per cent has been logged of its virgin timber; 24 per cent contains to-day partial and irregular stands of culled or second-growth timber of usable sizes; 29 per cent has been stripped clean of merchantable products, and is now producing a partial growth of young trees; 17½ per cent of our forest area, or an aggregate of 81,000,000 acres, has been stripped of its merchantable timber and burnt and has become practically idle, unproductive land.

The remaining forests of the United States are now being cut at the rate of about 5,000,000 acres annually. From eight to ten million acres of forest land are burned annually. Our supply of merchantable timber is dwindling steadily and is becoming more and more largely confined to portions of the United States which are far removed from the great bulk of the lumber consumers, 61 per cent of the timber left is west of

the Rocky Mountains, whereas four-fifths of the population, about four-fifths of our agriculture, and easily nine-tenths of our manufactures are east of the Rocky Mountains. Large areas of the virgin forests which hitherto have largely supplied this country with products made of wood have been converted into lands that are largely or wholly unproductive. In the meantime the transportation costs on forest products have steadily risen. It is not an exaggeration to say that two-thirds of the lumber users of the United States, in our most densely populated farming and industrial districts, pay more per thousand feet in lumber freight alone than they paid for the delivered commodity 30 years ago.

Federal legislation to reforest our timberland is needed because the United States is now consuming wood four times as fast as it is being grown. We are steadily eating up what is left of our forest capital, and by reason of this fact the further fact that the timber that is left is steadily being contracted in parts of the country which are distant from the great bulk of the users of forest products, the country now faces the definite prospect of a growing scarcity and increasing cost of everything made from wood. That is why the timber supply problem is a national problem, which must be dealt with by Federal legislation. It is a problem which in the long run affects every class of American citizens; it affects the manufacturer, the home builder, and the farmer to an almost equal degree. The burden of this problem is, I think, just as universally distributed as is the burden of the fuel problem, or of the food supply problem in times when those problems become critical. It is a problem that is nation wide, and it must be dealt with in a nation-wide way.

Now, it may also be pertinent to ask just what has been done thus far toward meeting this situation and to reforest the timberlands as they are cut. Seventeen per cent of the forest land of the United States has been placed in national forests where its continued productivity is assured. During the past 10 years the national forests have been extended by purchase at a snail's pace, under an act for the protection of navigable watersheds, at the rate of something less than 200,000 acres per year.

Mr. CLARKE. How long has that policy been going on?

Mr. GREELEY. For the extension of national forests by purchase?

Mr. CLARKE. Yes.

Mr. GREELEY. Since 1911.

The Federal Government has furnished limited cooperation to a number of States in forest protection, this also being confined to the watersheds of navigable streams.

The fund that is now available for that work in the current appropriation bill is \$400,000, which is a relatively small sum in comparison with the work that is to be done.

Largely through Federal aid and stimulus, forestry work of one sort or another has been started by 29 States. This consists chiefly of fire protection, accompanied by educational work among timber owners, the distribution of forest trees for planting, and the creation of State forests to a total of some 3,500,000 acres.

Largely through State and Federal stimulus and cooperation, private forest owners or groups of owners have organized fire protection on their own lands or cooperated with public agencies in furnishing such protection. Approximately 150,000,000 acres of privately owned forest land now receives some degree of protection from fire, often an inadequate degree. Altogether, through such private efforts backed by Federal and State aid, we may say that the task of protecting the privately owned forest lands in the United States from fire to-day is just about one-third done.

This represents, outside of the creation and extension of the national forests, the most valuable development that has yet been brought about for the perpetuation of our timber supply, and it has been accomplished very largely through a practical application of the principle of cooperation. Federal agencies have cooperated with State agencies, and the work of these public agencies has encouraged the cooperation and participation of landowners. In many instances these forest-protection activities, beginning in a purely cooperative way, have led to the enactment of State legislation which makes fire protection an obligation on the part of landowners. The work has been built up and grown largely through the cooperative attitude with which the question has been approached.

I would also like to mention that conservative methods of cutting and the planting of forest trees have been undertaken by a few timberland owners here and there, particularly in the Eastern States. These developments have not yet reached an extent sufficient to have an important effect upon our prospective timber supply, but they are significant as showing what can be done and what is the trend in the management of our forest lands.

Now, just what should Federal legislation seek to accomplish on this subject? I would say that the definite aims of Federal legislation dealing with forestry should be to keep all forest lands in the United States, whatever their ownership, continuously productive; its aim should be to bring about the starting of a new crop of timber just

as fast as an old crop of timber is harvested. By this means, and this means only, can the needs of the United States for commodities made from wood be adequately met.

Specifically, the first object of legislation by the United States Government should be to protect the 53 per cent of our forest-growing land, the 245,000,000 acres, widely distributed in many Eastern and Southern States, which contains culled timber, small second-growth timber, and young trees; and to make sure that this land now drawn upon for many products is reforested as rapidly as it is cut.

In the second place, the aim of Federal legislation should be to reforest the three or four million acres of virgin timber which is now logged annually.

And, thirdly, the aim of such legislation should be to restore to productivity the 81,000,000 acres of land which are now completely denuded and idle, and to do this as rapidly as it can be brought about. This can be done in part by fire protection alone, and in part only by tree planting combined with adequate fire protection.

I want to point out that there is no lack of forest land in this country. There will be no permanent shortage of timber if all the land not needed for agriculture can be kept at work producing wood. The aim of Federal legislation must be, therefore, to restore forest land now idle to productive use and to prevent any of the land now containing merchantable timber or young growth from becoming idle through forest fires or destructive methods of logging.

How can these results be accomplished? I would suggest, in the first instance, that to keep all of our forest lands productive there must be an aggressive policy of extending the national forests. This bill, in the last five sections, proposes to do this:

First, through a classification of the lands remaining in public ownership or under public control and the incorporation in national forests of such of those lands as are chiefly valuable for growing timber or protecting sources of water. As far as our estimates indicate, there are approximately 11,000,000 acres of such land, whose disposition now rests with the Federal Government.

In the second place, we should extend our national forests through authorizing the purchase of forest lands on an adequate scale and without limiting such purchases to the watersheds of navigable streams, unless a limitation of that character is unavoidable on strictly constitutional grounds. The extension of national forests by purchase should aim particularly to include lands now denuded, so that the Government may restore them to productive forests, and of other forest areas in key regions where public ownership is most critically needed. I feel that the Federal Government itself should take an active part in restoring the 81,000,000 acres of denuded land to productivity where the work is going to be relatively difficult and costly. We are now doing such work on portions of the land already in national forests, but I do not think we should stop with the existing national forests when we are confronted with 81,000,000 acres of private land which are now practically waste.

MR. JONES. Is it your idea that the Government should expend money for the development of private lands?

MR. GREELEY. No; indeed not; but the Government should acquire portions of them and then develop them.

MR. JONES. The Government should acquire it and then make it a national forest?

MR. GREELEY. Yes, sir.

MR. JONES. Like our national forests are now?

MR. GREELEY. Like our existing national forests.

MR. JONES. Then it is your idea, at any time the Government desires to take any timber off those lands, to sell the timber?

MR. GREELEY. To sell the timber under forestry methods.

However, 79 per cent of all the forest lands in the United States are now in private ownership, and notwithstanding the extension of national forests on as large a scale as practicable, notwithstanding all the encouragement that can be given the creation of State forests and municipal forests, which I believe is desirable, it will still be impossible for public agencies to acquire all of the forest land in the country, or even a major portion of it. Large areas of forest land will necessarily remain in private ownership. To keep these productive, Federal legislation should encourage the planting of trees by cooperation with the States in the growing and distribution of forest planting material. Of still greater importance, it should not only encourage, but assist in the establishment of effective, nation-wide protection from fire, covering all classes of forest land, and with reasonable cooperation required on the part both of the State and of the landowner. And, furthermore, in my judgment, Federal legislation should set up some method of exercising reasonable public control over the cutting of private timber to the extent necessary to insure the prompt reforestation of the lands cut.

Mr. TINCHER. Now, let me see if I understand what you mean. A man owns a forest, and it is your idea that we could pass some kind of legislation saying to him that he must limit his cutting of trees of a certain kind to a certain dimension, or that he must replant to a certain extent?

Mr. GREELEY. No, sir; I do not think that you should go into too much detail in the legislation. I will explain that a little further on.

Mr. TINCHER. Very well.

Mr. CLARKE. Right there, may I ask you what is the policy of the French Government along that line, and of the German Government?

Mr. GREELEY. The policy varies in the different European countries. The best example, and probably the most profitable example to the United States, is that of Sweden, whose national law requires that all forest lands be kept continuously productive. Under that law is set up a local board, which functions for each subdivision of Sweden, corresponding in area to one or two of our counties.

The board is composed of a State forester, one or more local administrative officials, and representatives of the local forest owners, agricultural organizations, and forestry associations. It enforces the national law in its own territory, prescribes methods of cutting and planting on the various types of forest land, conducts educational work among forest owners, and has control of certain taxes paid by forest owners, which defray the expenses of the board and are also used for growing planting stock and other measures for the benefit of the forests. The board institutes legal action against forest owners which do not comply with its requirements or special rulings. It also has certain authority in enforcing the planting of forest lands which have been denuded or in conducting such planting at the expense of the landowner. Under the national law it prescribes all detailed requirements and methods, such as Judge Tinchter referred to a moment ago.

Mr. CLARKE. How long has that been in operation?

Mr. GREELEY. Ten or twelve years.

Mr. ASWELL. Through cooperation with the States, the States could specify certain limitations?

Mr. GREELEY. Yes. I will develop that a little more fully later on.

I would like to refer, in passing, to the question of forest taxation. Some equitable form of taxing forest lands, adapted to the long-time character of their crop, is a necessary and important feature of reforestation. It is obviously, however, one lying within the jurisdiction of the several States with which Federal legislation can not deal, except that the investigation of this subject and the encouragement of wise State laws for the taxation of forest lands should be provided for.

Now, to carry out such a program on the private forest lands of the United States—that is, a program which will insure their reforestation—involves, in my judgment, putting such lands, in a sense, in the same class as public utilities. That is to say, we must recognize that there is a dominant public interest in the way in which this form of private property is used. Forest lands are thus comparable in certain respects to other forms of private property which are now recognized as public utilities and which are subject to special form of public control. In stating this principle, however, it must be emphasized with equal force that the growing of timber is an economic process and that timber can not be produced unless it is a practicable and reasonable undertaking for the owner of the land. If the Government undertakes to control the use of private forest lands, it must accept an obligation on its own part to aid the owner to a reasonable and equitable degree in accomplishing the benefits to the public which are desired in the management of his property. In other words, it must be made economically feasible for the landowner to comply with the public requirements. That, Mr. Chairman, brings me back to the fundamental idea of cooperation, which I feel must not be lost sight of.

State legislation in this country already affords illustrations of the application of this principle of public control over forest lands. The law of Oregon which requires forest owners to protect their lands from fire within a cost not to exceed 5 cents per acre annually is a case in point. The law of Minnesota which authorizes the State forestry board to require and enforce the disposal of slashings in timber cuttings, is a further example. The laws of New Hampshire and Louisiana which require operators on pine lands to leave not less than one seed-bearing tree per acre clearly embody the exercise of public control to maintain the continuous productivity of timbered areas. Another law of Louisiana which enables the owner of cut-over land to obtain the benefit of a low and fixed tax rate during the period of growing a timber crop illustrates the principle of public cooperation or of compensating benefit to the landowner whose property is so used as to meet the public interest.

Mr. ASWELL. May I interrupt you there?

Mr. GREELEY. Surely.

Mr. ASWELL. In this case that I spoke of, where 30,000 acres were set apart for reforestation, the State exempted that man from taxes entirely for 30 years. Is that in line with your idea?

Mr. GREELEY. It is, but if complete exemption was granted that must have been a special case.

Mr. ASWELL. That was a special case.

Mr. GREELEY. The general law of Louisiana enables the owner of cut-over land to go to the State commissioner and enter into an agreement that his land will be set apart for 30 or 40 years for reforestation; and thereupon the existing tax assessment on his land becomes fixed for the period of that agreement.

We are still very far, however, from having developed any uniform or consistent application of this principle of a reasonable exercise of public control over forest lands combined with equitable forms of public assistance. To bring that about by one means or another must be one of the important features of Federal legislation on this subject.

How shall public control over private forest lands be exercised? Two methods for exercising public control to insure the continuous productivity of forest lands have been advocated in measures now before Congress; and it is in the discussion of those two methods that the principal controversy in regard to Federal legislation has arisen. Sections 1 and 2 of the Snell bill would accomplish the purpose by authorizing the Department of Agriculture to define and establish what is necessary to keep the forest lands in each region productive, and thereafter, through financial cooperation, to encourage the enactment and enforcement of such necessary measures by the several States through the exercise of their recognized police powers. In other words, Judge Tincher, the Secretary of Agriculture would say that to secure reforestation of the pine lands of Louisiana, such regulations should be prescribed as would prohibit the cutting of trees under a certain size or would require leaving of so many seed trees per acre, together with establishing a necessary degree of fire protection. He would then offer to cooperate with the State of Louisiana putting those requirements into effect by State laws.

Mr. JONES. The State could do that independently of the Federal Government?

Mr. GREELEY. The State could do it independently of the Federal Government.

Mr. JONES. It would not be a matter of cooperation then?

Mr. GREELEY. Not necessarily. The bill introduced by Senator Capper, on the other hand, seeks to accomplish the same purpose by the exercise of direct Federal authority over the treatment of forest lands through the taxing power of the National Government.

The Snell bill seeks to accomplish the purpose through the leadership of the Federal Government as a standardizing and cooperating agency and as a cosharer of the cost in much the same manner as the Federal Government has brought about the development of scientific agriculture and the construction of public highways. I refer to the extension of scientific agriculture as provided in the Smith-Lever Act. Under the provision for Federal aid in the construction of highways, the specification and standards adopted by the States must conform to Federal requirements.

The Snell bill recognizes the need for a local adjustment of forestry requirements and gives each State direct and authoritative participation in the establishment of such requirements. The most desirable features of the Snell bill, in my judgment, are, that in recognizing the authority of the States it raises no question of constitutional jurisdiction; that it encourages local effort and local participation in the establishment of reforestation requirements, in line with the successful results already obtained in other forms of Federal cooperation; and that it affords a means of making substantial progress at once along the lines of economic and political development most commonly followed in the United States. The weakness of the Snell bill, if it has one, I would say lies chiefly in the fact that its application rests upon local initiative and local response to the cooperation offered by the Federal Government. Consequently, the development under it would not be consistent or uniform; some States would lag behind while others forged ahead. The lack of uniformity in the forestry requirements imposed by different States might disrupt competitive relations between different lumber producing regions. And the regulatory power exercised by the States under its terms would tend to be less positive and effective than regulatory power directly and uniformly exercised by the Federal Government.

I am discussing the matter in this way because I want the committee to get my viewpoint on the fundamental principles involved in this legislation. They are bound to come before you in this discussion, and they should both be fairly and thoroughly considered.

Mr. CLARKE. Would not the States, in the long run, be penalized if they did not cooperate and bring about proper timber growth; would they not in the long run suffer in an economic way?

Mr. GREELEY. Yes; I feel that they would. In the long run it would certainly be to the economic disadvantage of any State that did not get in line.

Mr. TINCHER. Will you elucidate a little further on that question?

Mr. GREELEY. I think Mr. McLaughlin will support me in this statement: Look at the State of Michigan to-day, with some 10,000,000 acres of idle forest lands, the forest industries moving out, and the lumber consumers dependent upon sawmills in the South or the far West.

The bill introduced by Senator Capper seeks to remedy these difficulties by a uniform and nation-wide control of private forest lands vested in the Secretary of Agriculture. Local participation in such control would be advisory only. Aside, however, from the constitutional question as to whether the National Government may exercise police jurisdiction over private property in connection with Federal taxation, the adoption of so far-reaching a plan of Federal control over private business and private property would make the enactment of such a law a matter of difficulty and probably of extended delay. Furthermore, it involves a conflict between State and Federal jurisdiction, since the States undoubtedly have equal authority to prescribe regulations of their own covering forest lands within their borders, an authority which is now being exercised by a number of the States. Further difficulties would arise—

Mr. JONES (interposing). Does the bill undertake to do this by a process of coercion? This money is not to be available unless certain regulations are complied with?

Mr. GREELEY. Yes; if they do not comply.

Mr. TINCHER. And the economic ruination of the State that does not come in?

Mr. JONES. You are going to force the States in by making them come in before they can secure their part of the funds that are appropriated under the bill.

Mr. SNELL. Is that not what we are doing now in connection with certain legislation; for instance, the highway bill?

Mr. JONES. Yes; but if you keep on you will soon have the Federal Government into everything.

Mr. CLARKE. How about the Towner maternity bill?

Mr. JONES. Yes; as I say, you will have the Federal Government into everything.

Mr. GREELEY. In my judgment, also, further difficulties would arise in the application of the Capper bill, through the lack of correlation between Federal requirements dealing with methods of cutting and the local laws dealing with fire protection and forest land taxation.

The actual growing of timber crops on a general scale depends upon an effective and equitable solution of three points in the problem, namely, protecting forest lands from fire, taxing them justly, and controlling the methods of cutting employed by the owner.

Mr. CLARKE. Will you please repeat that?

Mr. GREELEY. I say, the actual growing of timber crops on a general scale depends upon an effective and equitable solution of three points in the problem, namely, protecting forest lands from fire, taxing them justly, and controlling the cutting methods employed by the owner to the extent necessary to secure reforestation.

Mr. TINCHER. The last, of course, will bear a little elucidation?

Mr. GREELEY. Yes; that is the nub.

The CHAIRMAN. Just there, how do you propose to tax them? You speak of just and proper taxation; what do you have in mind?

Mr. GREELEY. To begin with, Mr. Chairman, as I have already stated, that is a subject that must be dealt with by State legislation. All that the Federal Government can do is to study the question and enlighten the States. A number of States have already adopted laws dealing with forest land taxation by prescribing, usually, a low fixed rate during the period when the crop is being grown and then levying a tax when the crop is cut, in the nature of a severance tax or yield tax.

The CHAIRMAN. Your idea is that it would encourage the growing of timber by properly adjusting taxation?

Mr. GREELEY. The bill authorizes and directs a study of forest taxation.

As far as I have studied this question it has seemed to me that these are simply three parts of the one definite job of getting the lands reforested, and that since the States must unquestionably deal with the thousand and one aspects of forest protection and with the matter of forest taxes, the States can also deal more equitably and effectively with the control of methods of cutting, so as to accomplish the results desired. All three phases of the problem must be worked out together.

Mr. KINCHELOE. Let me ask you about that: Do you mean to say that the State can tell me, if I am the owner of a forest, whether I can cut a certain tree?

Mr. GREELEY. Yes, sir.

Mr. ASWELL. That is undoubtedly true.

Mr. TINCER. And they can tell you whether you shall plant another one in the place of the one you cut.

Mr. KINCHELOE. In the same way could they not tell me whether I should sell a certain steer that I have raised for the market—could not they do that on the same reasoning?

Mr. ASWELL. Your selling of a steer does not affect the public interest, and the cutting of a tree does.

Mr. KINCHELOE. I think it does. The public is vitally interested in the meat and bread problem at the present time.

Mr. JONES. But the question of the sale of your meat and meat products is a vitally different question from the question of preserving our natural resources. It revolves itself into a question whether it is not a question of the conservation of natural resources.

Mr. CLARKE. And they can regulate you, in the selling of that steer, whether it meets certain conditions, or not.

Mr. GREELEY. Certain States have regulatory laws now.

Mr. KINCHELOE. What States have that law now?

Mr. GREELEY. A number of States have regulatory laws dealing with fire prevention and slash disposal. Two States have adopted laws prescribing what timber shall be left in cutting.

Mr. KINCHELOE. What States are those?

Mr. GREELEY. The States of Louisiana and New Hampshire. The constitution of the State of Louisiana provides that the legislature is authorized and directed to enact such laws as it deems necessary to conserve the forests and other natural resources of the State.

Mr. KINCHELOE. But you were asked if the States had power to do that, and you said they did.

Mr. GREELEY. The question comes down to whether forests are natural resources.

Mr. KINCHELOE. You suggested that all the States in the Union have a right to exercise that authority; you say they have.

Mr. GREELEY. They have the right; they have not all exercised that right.

Mr. KINCHELOE. You mean a constitutional right. Are you familiar with the constitution of the State of Kentucky?

Mr. GREELEY. No, sir; many of them have not yet incorporated such provisions in their constitutions. I thought you meant under the Federal Constitution.

Mr. KINCHELOE. I am talking about the State.

Mr. JONES. If they could not comply with it under the law, then the only way they could comply with it would be to amend their constitution.

Mr. ASWELL. That might be a good thing to do.

Mr. JONES. In other words, you want the Federal Government to come in and practically compel them to amend their constitution?

Mr. GREELEY. I want the Federal Government to encourage the States to amend their constitutions and enact the necessary legislation.

Mr. JONES. But if the States could not do it under their constitutions, then you would bring a process of coercion to bear to require it—

Mr. GREELEY (interposing). I think by the terms of this bill—

Mr. JONES (interposing). Which they could avail themselves of only by amending their constitution, and amending their style of government?

Mr. GREELEY. There would be no coercion about it whatever.

Mr. JONES. They would either have to approve it or get no benefits of it?

Mr. GREELEY. Certainly.

Mr. ASWELL. Would that not be a good thing?

Mr. JONES. It might be in a given case, but not generally for the country, perhaps.

Mr. KINCHELOE. I am sorry I did not get in in time; I just got my notice a few moments ago. I want to ask you: You said you would compel them to grow timber on these lands; what lands did you have reference to?

Mr. GREELEY. I have reference to the timbered and cut-over lands that by some definite classification or as the result of economic conditions are not suitable for any other purpose than growing wood.

Mr. KINCHELOE. The reason I ask you that is, that there are hundreds of thousands of acres of land in Kentucky, in my district, that the timber has been cut off of, and now if the water was drained off of those lands, they would be the finest farming lands in the world. Now, does this say that they should put them in timber?

Mr. GREELEY. No, sir; there is absolutely no restriction upon the development of land for agriculture.

Mr. KINCHELOE. I wanted to know that.

Mr. TINCHNER. As I gather your testimony, you rather think that the Capper bill would be all right, but probably it would be a little harder to pass it; it would meet a good many obstacles, but the principle of the thing would be a good thing for the country?

Mr. GREELEY. I am not prepared to say that, because I think we will accomplish a great deal under the principle of cooperation and recognizing the right of these localities to have something to say in their own affairs. The Capper bill represents outright coercion. It passes by the States absolutely. It jumps into a State and tells its forest owners what to do.

Mr. TINCHNER. And that is on the theory that the production of timber is of such importance that it is necessary to have really national legislation concerning it?

Mr. GREELEY. Yes, sir.

Mr. TINCHNER. Now, the other bill is based on the same theory, but approaches it in a different way, but still these States that you have cited might have a great economic loss or disaster by not coming in and taking part in the bill. In other words, they might go ahead and after they had cut off their forests, and then come in to the people of the Nation and not get much real benefit from the legislation in that way?

Mr. GREELEY. Yes, sir. The pressure of economic factors will tend to make all the States take advantage of such Federal legislation. As I have just said, I recognize, as everyone must recognize, that if we are going to approach this problem from the standpoint of coercion, there is no one who can coerce so effectively as the Federal Government.

Mr. JONES. That is a fact.

Mr. GREELEY. But if we are going to approach it from the standpoint of a cooperative development, with the Federal Government assisting, advising, setting up standards, and offering financial cooperation in getting them applied through local participation, then the answer is along the lines of the Snell bill.

Mr. TINCHNER. Well, coercion is a bad thing, generally. A child may be coerced into taking his medicine if the doctor thought it was a good medicine.

Mr. ASWELL. The Constitution might interfere with the Capper bill, though, might it not?

Mr. TINCHNER. Well, isn't there some constitutional objection to it?

Mr. ASWELL. No.

Mr. GREELEY. I am not prepared to answer that question, but it seems to me that the Capper bill rests on all fours with the present child labor law. Each of them seeks to accomplish certain police legislation through the exercise of the taxing power of the Federal Government. I am watching with a great deal of interest the action of the Supreme Court on the present child labor law.

The district court in North Carolina has held it unconstitutional. If the Supreme Court sustains that decision, I think it will indicate that the Capper bill principle is equally unconstitutional. Doubtless Mr. Pinchot and some of his associates would like to discuss that question.

Mr. CLARKE. Well, up to now then it is unconstitutional, is it not?

Mr. GREELEY. That is my opinion, but it is not a legal opinion, sir.

Mr. VOIGT. Has that case been argued before the Supreme Court?

Mr. GREELEY. Not as yet before the Supreme Court.

I wish to say this regarding the two principles embodied in these bills, that they are supplementary rather than opposing. Our States now have complete police jurisdiction over forest lands. Many States are exercising it in the form of fire protection laws, slash disposal laws, and laws governing methods of cutting. To the extent that further progress can be made through such State legislation with the cooperation of the Federal Government that appears to be a desirable result from every standpoint. For that reason I favor an immediate enactment in line with the principle expressed in the first two sections of the Snell bill. At the same time it is possible that the ultimate development of our national forest policy will indicate the necessity of exercising Federal authority in certain of these respects. Just how that can be worked out I am not prepared to say. I do not believe that the country is now ready for that step; and I think that we must work this whole proposition out much more fully and with more experience before we can effectively adjust Federal police jurisdiction to the police jurisdiction of the States.

In conclusion, Mr. Chairman, I want to urge the need for immediate action of some character by Congress. I feel that we should no longer permit this economic problem of timber supply to grow in seriousness without at least taking partial steps for its solution. It may not appear to the committee possible or desirable to attempt a complete national forestry policy in one piece of legislation. Among the advocates of national legislation there is really disagreement upon but one point, as to whether the States or the Federal Government should exercise control over the cutting of timberlands. On all other points there is substantial agreement.

I want to suggest that it may be the wiser course to draft a bill now which will cover the more essential points upon which there is substantial unanimity, leaving for future legislation, after public opinion shall have been more fully informed and crystallized, this one point, as to the control of methods of cutting timber. I recommend this only as an alternative to passing the matter by with no legislation whatsoever. I do not suggest this course because of any doubt in my own mind as to the wisdom and practicability of the principle embodied in the first two sections of the Snell bill for dealing with private forest lands. I suggest it simply because it would be unfortunate in the extreme to permit substantial progress in Federal legislation on forestry to be delayed or impaired by the conflict of views on this one feature of the whole program.

If the committee feels it desirable to consider this alternative, I suggest that it draft a bill providing for, first, sufficient legislative authority and an authorization of adequate appropriations for Federal cooperation with all of the States in forest fire prevention. In my judgment this outweighs all other measures in its immediate importance. A recent investigation undertaken by the Forest Service to ascertain what are the essential steps to keep the forest lands in each region productive indicates that with effective protection from fire not less than 75 per cent of all the forest lands in the United States would reestablish a valuable timber crop themselves; not the most valuable timber crop, but a crop of economic value.

Mr. GERNERD. Within what period would that be? Would you say within 40 years?

Mr. GREELEY. The process would be slower than if those lands were planted. But I would say within 25 years.

Mr. GERNERD. Within 25 years?

Mr. GREELEY. Yes; within 25 years. If we could by some act of the Almighty keep fire out of every piece of cut-over land, I think within 25 years 75 per cent of it would be reforested.

Mr. GERNERD. And have economic value? That the reforested land would have merchantable timber?

Mr. GREELEY. No; I don't mean with merchantable products. But it would be growing a crop of wood.

Mr. GERNERD. What I am getting at is this: How long a time would it take for that land to become of commercial value? How long would it take to produce trees of commercial value?

Mr. GREELEY. To produce a commercial product would take from 30 to 60 years, longer for high-grade material.

Mr. GERNERD. Depending upon the character of the trees?

Mr. GREELEY. Yes, sir.

Mr. VOIGT. Let me ask you a question. Are there any examples in this country to show that timber growing is commercially profitable, that is, that it will yield revenue on the investment?

Mr. GREELEY. Yes, sir. There are a good many examples, particularly in the northeastern States. There are a good many properties in northern New England which have been conservatively cut for two or three generations and have been increasing in value and producing a reasonable income during that whole period. There are a good many cases in New England, and to some extent in other States, where the planting of trees has been recognized as commercially feasible. That showing is sufficiently clear so that the State of Massachusetts has taken it up as a State activity. In other cases, at a number of points in the South and elsewhere, individual timber land owners have become satisfied that reforestation is commercially feasible, and are going into it. It is still, of course, very far from being general. Those are the exceptions, rather than the rule.

Mr. GERNERD. Are you finished with your statement?

Mr. GREELEY. No; not quite yet, sir.

As a second plank or section in such an alternative measure as I am discussing, I would urge a grant of authority with an authorization of a reasonable appropriation for effective cooperation with States in growing and distributing young forest trees for planting. This is an important phase of reforestation in a number of States having limited forest areas and in other States having large areas of denuded land which must be planted before it can again become productive. Elsewhere economic conditions are favorable to tree planting by land owners if reasonable public aid can be provided.

Thirdly, I advocate a broadening of the existing legislative authority with an authorization of adequate appropriations for extending national forests by purchase, with a view to the growing of timber on lands now cut over and denuded no less than to the protection of watersheds of navigable streams.

As a fourth section, I advocate the portions of the Snell bill dealing with the classification of all lands remaining under public control with a view to the addition to national forests by responsible executive agencies of areas found to be chiefly valuable for growing timber or protecting watersheds.

I also urge the immediate enactment of the provisions of the Snell bill dealing with research in reforestation and the utilization of timber.

I will be glad to elaborate on these points if the committee should desire it.

In conclusion I want to make it clear that I am not advocating a course of this character which would postpone to some future enactment legislation on the question of who should control methods of cutting as a substitute for the Snell bill but simply as a partial enactment of the complete program which the Snell bill contemplates. This question of the control of cutting forest lands must be definitely settled some time, and I would settle it now along the lines of Mr. Snell's bill. But if the committee does not deem it wise to include that subject in its present legislation, because of its controversial character, it may cover these other essential features of the program in a bill which would represent not a complete forest policy, but very satisfactory progress toward a complete policy. That is all I have to say, Mr. Chairman.

Mr. GERNERD. May I ask you a few questions at this point, Mr. Greeley?

Mr. GREELEY. Yes, sir.

Mr. GERNERD. Wouldn't it be far better for the National Government to purchase these large areas of detimbered lands in the different States and under the Federal supervision replant them and protect them, rather than under State supervision?

Mr. GREELEY. That would doubtless be the ideal thing, but from a practical standpoint I do not think we can ever acquire all of it. I do not think Congress would ever give us the money to do it.

Mr. GERNERD. Well, let me ask you something. After these lands are detimbered, aside from what mineral resources they may have, are they not practically valueless?

Mr. ASWELL. Oh, no; not the lands. There is much of the land that is valuable as land.

Mr. GERNERD. Oh, I know of any amount of land in Pennsylvania that when it is detimbered it is nothing but rocks.

Mr. ASWELL. There are certain parts of the country that are not covered with rocks.

Mr. GERNERD. I appreciate that.

Mr. ASWELL. Some of the finest farm lands in the country are some of the cut-over lands in the South.

Mr. GERNERD. I appreciate that that would be true. They would hardly retimber those lands, however.

Mr. ASWELL. Probably not.

Mr. GERNERD. They would not retimber such lands as those. But what you had in mind, Mr. Greeley, in reforesting the lands, are such lands as are peculiarly adapted for growing timber, and not for agricultural purposes?

Mr. GREELEY. Yes, certainly.

Mr. GERNERD. That was my thought.

Mr. GREELEY. Yes, sir.

Mr. GERNERD. In fact, in my section of the country where they do detimber land that is adapted for agricultural purposes, there is no thought of letting the stumps lie there. They have been gradually blasting them out, and putting the lands to agricultural purposes. But that is the thought that you have in mind?

Mr. GREELEY. Exactly.

Mr. GERNERD. That is, that you would use such lands throughout the country as are not adapted for agricultural purposes or for anything else but for reforesting?

Mr. GREELEY. Yes.

Mr. GERNERD. Well, there should hardly be any material cost in the purchasing of lands of that kind. I would like to have some idea as to your experience with regard to the cost of such lands.

Mr. GREELEY. We have made several estimates which indicate that the denuded lands of this class could be acquired in large quantities for under \$3 or \$3.50 an acre. In undertaking a plan for extensive purchases of that land, we should figure that the cost, including overhead expenses, would probably amount to \$3.50 an acre on the average.

Mr. GERNERD. That is just for the land?

Mr. GREELEY. Yes, sir.

Mr. GERNERD. Now can you give me an idea as to what it would cost to replant an acre of such land?

Mr. GREELEY. It would range from around \$5 an acre for land similar to National forest areas in Michigan, which we are now planting with trees, up to \$12 or \$15 an acre in the more difficult and expensive regions.

Mr. VOIGT. Then there is the care required after the planting?

Mr. GREELEY. Protection from fire only.

Mr. ASWELL. Five cents an acre.

Mr. GREELEY. A large part of this land will reforest itself if it is fully protected.

Mr. GERNERD. But still, with Federal assistance it would come so much faster.

Mr. GREELEY. There would still be a good deal that should be planted.

Mr. KINCHELOE. Now this Snell bill contemplates a compulsory planting of forests by the Federal Government and by the States.

Mr. GREELEY. By the States if they wish to cooperate.

Mr. KINCHELOE. Now, I understood you to say awhile ago in answer to my question, that there were only two States in the Union that have provision in their constitution. Vermont was one of them?

Mr. GREELEY. No, New Hampshire and Louisiana.

Mr. KINCHELOE. New Hampshire and Louisiana.

Mr. GREELEY. Yes.

Mr. KINCHELOE. There are only two States in the Union which have a compulsory provision; that is, that they have a right under their constitution to enact legislation of a compulsory nature.

Mr. GREELEY. No, sir; I didn't say that. I said that only two States have passed statutes dealing with the methods of cutting.

Mr. KINCHELOE. Are there other States that have the power under the constitution?

Mr. GREELEY. I can not answer that question specifically. I know, however, that the attorney generals of several States have held that the States have such power under their constitutions. In other States they probably do not.

Mr. KINCHELOE. Now the point I was getting at is this: In the States that have not the power under their constitutions, as they are at present, what inducement would there be for those States to submit amendments to the constitution to their people, to submit a proposition to their people for the adoption of constitutional amendments, to give them power under this bill?

Mr. GREELEY. The immediate inducement would be Federal cooperation. The greatest inducement would be their own economic welfare.

Mr. KINCHELOE. That same proposition would appeal to them in the absence of national legislation, would it not?

Mr. GREELEY. Certainly. The added inducement, if this bill goes into effect, would be the offer of financial cooperation by the Federal Government if the States carry out certain prescribed measures.

Mr. KINCHELOE. Well, that is really the only inducement under the Snell bill, isn't it?

Mr. GREELEY. I don't think there is a single State which now lacks authority to prescribe for the protection of forest lands from fire, and that is the first thing we have got to get across under this bill, or under any other bill. There are a great many States that need to be led up to the point of recognizing the need for such legislation, and Federal cooperation, during the past 10 years, has proven to be a very effective means of getting the States aroused on that question, not only in enacting legislation, but also in making State appropriations.

Mr. KINCHELOE. Well, the point I was trying to get at, on which I asked you the questions—neither of which questions you answered—is this: You say one inducement is, of course, preservation of the forests of the country. Of course they have that inducement now, in the absence of any enactment of Federal legislation. What I am talking about is this specific bill. The only inducement under this bill for these various States who have not the power now under their constitution to enact legislation for the preservation of their forests, to make amendments to their State constitutions, would be the appropriations that they would receive from the Federal Government under this bill.

Mr. GREELEY. The advantage of Federal cooperation; yes, sir.

Mr. JONES. You spoke a while ago of making a limitation as to the size of trees they could cut—that is, not permit them to cut trees under a certain diameter. If you had that general regulation, then it would interfere with any of these lands ever becoming agricultural lands, unless you classify the lands and make an exception in certain cases.

Mr. GREELEY. Yes; that would be entirely possible. I think that Louisiana deals with that situation by imposing penalties, under its law, where this requirement is not met, unless the land is put to agricultural use within some stated period. Of course the leaving of certain classes of timber applies only in certain localities. It does not apply universally.

Mr. JONES. Well, it is not your idea, then, to prevent any of this land that is good agricultural land from becoming such?

Mr. GREELEY. Not at all.

Mr. JONES. It is not your idea to prevent any of this land that is good agricultural land from becoming agricultural land by means of regulations forbidding the cutting of trees under a certain size?

Mr. GREELEY. Not at all.

Mr. JONES. Well, that was not made clear in your statement, Mr. Greeley; that is the reason I asked the question.

Mr. KINCHELOE. As a rule, is land that is overflowed land as good land for rehabilitation of forests as land that does not overflow?

Mr. GREELEY. There are many overflowed areas in this country that produce excellent forests, but most of them have a high agricultural value.

Mr. KINCHELOE. Absolutely. That is the point I make, that they have a high agricultural value.

Mr. GREELEY. And I do not expect that the overflowed lands along the Mississippi Delta, for example, or in many other localities are going to be kept in forests after the virgin timber is cut. They are too good lands to be used for that purpose. They are too valuable for the raising of agricultural crops.

Mr. KINCHELOE. But suppose the regulations of the State legislatures would classify them as forest lands, what alternative would the individual owner have than to rehabilitate it into forests rather than to use it for agricultural purposes?

Mr. GREELEY. If the legislature of the State required it, I suppose it would have to be done; but that is not contemplated in the requirements which would be recommended by the Federal Government.

Mr. KINCHELOE. The point I am making, Mr. Greeley, is this. Mr. Aswell said that there are hundreds of thousands of acres of land in the South that are valuable for agricultural purposes; more so than for reforesting. Now, for instance, I live in the valley of the Ohio; there is overflow land there as rich as the delta of the Nile. Now it is a question whether that would be more profitable to be converted into agricultural land than rehabilitated into forests. Now, is it not your opinion that it would be more valuable as agricultural land?

Mr. GREELEY. Personally I have very little doubt about that. I expect to see all of those delta areas become agricultural lands. There is absolutely no conflict there, sir. We have no quarrel whatsoever with the farmer in the use of land. The thing we are after is the millions and millions of acres that are not agricultural lands and which everybody recognizes as not being agricultural lands.

Mr. GERNERD. May I ask you another question?

Mr. GREELEY. Yes.

Mr. GERNERD. What are these large lumber companies doing that have bought millions of acres of timberland, after they are through with the cutting of the trees? Are they doing anything toward the rehabilitation of those lands?

Mr. GREELEY. That situation varies so widely, sir, that it is impossible to answer it in a nutshell.

Mr. GERNERD. Is there any movement along that line that you know of?

Mr. GREELEY. Yes, sir; you will find a number of large lumber and paper companies that are definitely reforesting their lands even to the extent of replanting. You will find in several regions various concerns that have decided upon holding their cut-over lands and reforesting them.

Mr. CLARKE. Also preventing the cutting down of trees of certain diameter?

Mr. GREELEY. Yes. Now, in other cases, particularly as you go farther west where timber values are lower, you will find a good many lumber companies that have not answered that question yet; they do not know what to do with their cut-over lands.

Mr. GERNERD. I appreciate that. Now let me ask you another question. It is possible to have statistics of some value along that line as to what private concerns are doing toward reforestation?

Mr. GREELEY. That is something that I am very anxious to get assembled in statistical form, but we have not yet been able to work it out so as to have satisfactory information. We know of individual cases. We have not gotten the whole situation assembled as yet.

Mr. GERNERD. I also know by personal observation that in certain States—I know in New Jersey particularly—thousands of acres of land have been purchased by different municipalities as a watershed, and that land is being reforested; they are replanting trees for that purpose alone. Do you know whether that work is going on very extensively throughout the country?

Mr. GREELEY. It is very extensive in the eastern States.

Mr. GERNERD. I know it is very extensive in New Jersey, but can you tell me whether it has gone—

Mr. GREELEY (interposing). It is extensive in the eastern States. Much less extensive in the western States. But the idea of reforesting municipal watersheds and watersheds for power development, as well as for irrigation development in the West, has taken very firm hold. In the aggregate a great deal of that work is now being done.

Mr. GERNERD. Yes. Now, another thing that I want to ask you. These are questions that have been on my mind for a long time. The question of waterfall or rainfall is very largely influenced by the detimbering of lands? Is that true?

Mr. GREELEY. You are leading me pretty deep—or pretty high—I don't know which. That is a question that scientists have discussed for a hundred years and are still in disagreement. I think that the majority of the scientific opinion runs to the belief that denudation over large areas affects rainfall. It is not true locally. You could cut off a square mile of forest without any appreciable effect upon the rainfall. When you denude enormous areas frequently there is an effect. But that, in turn, is influenced by topography and by the normal, seasonal climatic variations, so that you can not answer it by any rule of thumb.

Mr. GERNERD. The only reason I asked it was because it was very seriously discussed by the different rangers in my section of the country.

Mr. TINCHER. Well, others have the theory that if they cut them down they get more.

Mr. GERNERD. Yes.

Mr. TINCHER. On the theory that everything that goes up must come down, living where I do, I should be in favor of cutting off all the trees.

Mr. CLARKE. Well, you have a theory down in your country there that the greater the area that you cultivate, why, the larger the rainfall.

Mr. TINCHER. I would like to talk with you a minute or two about the bill, and for the reason that I have an idea that if we report this bill out there will be a lot of gentlemen over on the floor of the House that will want to ask a lot of questions about it. Now, section 1 of the bill is:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture, through the Forest Service, is hereby authorized and directed, in cooperation with appropriate officials of the various States or other suitable agencies."

Now, you are the Forest Service that is mentioned there?

Mr. GREELEY. Yes.

Mr. TINCHER. If this bill would become a law you would be called upon to cooperate with the "appropriate officials of the various States or other suitable agencies, to recommend for each forest region of the United States the essential requirements in protecting timbered and cut-over lands from fire." I just wondered what was meant by "other suitable agencies" there; with whom you would cooperate except the States?

Mr. GREELEY. I would cooperate with anyone whose technical or practical experience made his advice desirable.

Mr. TINCHER. Yes; but that would not be a "suitable agency." That would be advice from some individual. But you are authorized here by the bill, and you are directed, "in cooperation with appropriate officials of the various States or other suitable agencies, to recommend for each forest region of the United States the essential requirements in protecting timbered and cut-over lands from fire."

Now, if I was proponent of the bill on the floor and some one would ask me what was meant by "other suitable agencies" there I would want to be prepared to state who you would cooperate with. I would not take that to mean that if you would be in Pennsylvania that you would ask Mr. Pinchot what he thought except in his capacity as a State agency.

Mr. GREELEY. I would certainly consult with Mr. Pinchot in Pennsylvania, and other men like him in other States.

Mr. TINCHER. Now, you are directed in this bill to cooperate with these agencies. Now, who are they?

Mr. GREELEY. The theory of that proposition is just this. Responsibility for determining what these essential requirements are rests absolutely with the Secretary of Agriculture and with nobody else.

Mr. TINCHER. Now, right on that point, we will have to defend the law if we take it over there, and on that point let me call your attention to the language of the statute again: "is hereby * * * directed, in cooperation with appropriate officials of the various States or other suitable agencies" to recommend certain regulations for fire protection.

Mr. GREELEY. Yes.

Mr. TINCHER. Now, we will be called upon to defend the exact language of the bill if we report it out, and I wanted to know if you have anything definite in mind about these "suitable agencies."

Mr. GREELEY. Yes, that means that in determining what the essential requirements in each region should be the Forest Service should not only consult the State foresters, but the timber owners, either as individuals or as associations, the technical heads of forest schools, and others who have studied thoroughly the conditions in their own localities. A great deal of our work in fire protection up to the present time has developed successfully through a process of cooperation and consulting the lumbermen.

Mr. TINCHER. Well, this cooperation really means cooperation with the State, that is the point I mean?

Mr. GREELEY. That is the essential point, yes.

Mr. TINCHER. That is what I wanted to get at. Now you are "directed, in cooperation with appropriate officials of the various States."

Mr. GREELEY. Yes.

Mr. TINCHER. Now I can not see much occasion for "or other suitable agencies," because you have got to have the cooperation of the State, the appropriate officials of the State, and I do not see much occasion for having any quarrel with any other agency.

Mr. GREELEY. I don't think there would be any quarrel with any other agency. This was put in for the purpose of allowing the requirements to be developed by the cooperative method as far as possible.

Mr. KINCHELOE. Those would not be agencies unless they represented somebody.

Mr. CLARKE. Would you go so far as to include cooperation with the lumber and pulp companies?

Mr. TINCHER. The balance of the section makes this rather important.

Mr. KINCHELOE. Let me get this in.

Mr. TINCHER. All right.

Mr. KINCHELOE. Would the wording of this be so broad as to include cooperation with the various timber and pulp companies and private ownership enterprises?

Mr. GREELEY. The financial cooperation provided for is to be extended only to the States. Now these first lines deal with the preliminary process of determining what the requirements on the basis of which we are going to cooperate should be. The intent of that language is to provide that in determining what those essential requirements should be, the Secretary of Agriculture should not only consult the States, but should consult the lumber producing organizations and the conservation organizations in the region, and any others whom he believes can contribute to the formation of practical and effective requirements. That is the intent of it.

Mr. TINCHER. I see. But the point I have in mind is this. We are authorizing later on in the section the expenditure of Government funds.

Mr. GREELEY. Yes.

Mr. TINCHER. Now let us pass that for the present. You are directed by law, and you are following the law, and you have talked with the State foresters, and you have decided that you will promulgate certain regulations for a given area. Those regulations are to protect the forests from fire. Not only the forests, but the cut-over lands. Those regulations are for the reforestation of the denuded lands. And also they are regulations providing for the cutting and removing of the timber by certain methods. Now there is an appropriation of a million dollars authorized in the section, annually, for your cooperation in this regard. That is entirely speculative, isn't it, as to the amount that would be required for that at this time?

Mr. GREELEY. No, sir, it is not speculative. It is rather the minimum. We now receive an appropriation of \$400,000 for cooperation with the States in fire protection alone.

Mr. TINCHER. That is on your own lands?

Mr. GREELEY. No, that is on State and private lands. Wholly aside from the protection of the national forests.

Mr. TINCHER. Yes.

Mr. GREELEY. We asked Congress last year for a million dollars for fire protection in cooperation with the States in order to enable the Government to do what we feel is its proper share. And the question was seriously raised at that time if a million dollars was not too little for the purpose. The amount of work that remains to be done and the extent to which additional State expenditures and State organizations need to be encouraged make a million dollars an absolute minimum for the purpose.

Mr. GERNERD. Let me ask you another question. In this scheme here you emphasize a great deal fire protection. I want to know whether you have lost sight of the fact as to the stamping out of diseases that are playing such havoc with the forest lands of our country; that are playing as much havoc with the forest lands of our country as fire; for instance, you take the blight with regard to the chestnut trees. Does this bill contemplate any assistance along that line? I saw a statement not so long ago that the loss to the chestnut trees in this country was figured around \$8,000,000.

Mr. GREELEY. Usually there has been special Federal legislation providing for cooperation in stamping out these tree diseases.

Mr. GERNERD. Well, what work is the forestry department doing along that line?

Mr. GREELEY. That is not within our jurisdiction, sir. That comes under the Bureau of Plant Industry, which has a special section devoted to the study and eradication of tree diseases.

Mr. TINCER. And they get an annual appropriation for that purpose, do they not?

Mr. GREELEY. They get an annual appropriation for it. They have done a lot of work on the chestnut blight, the white-pine blister rust, and other similar diseases.

Mr. GERNERD. Well, I just wanted to know whether this bill contemplated any such cooperation along that line.

Mr. TINCER. I don't think it does, does it?

Mr. GREELEY. No, it does not contemplate any cooperation along that line. Situations of that kind are in the nature of temporary emergencies; they come and they go. But the work provided for here is permanently necessary to secure reforestation.

Mr. CLARKE. Incidentally, what is now the law will be hitched on possibly with this.

Mr. GREELEY. Possibly, but that has no bearing on the main question. The treatment of tree diseases is a special subject that requires a specialized force of men.

Mr. TINCER. What I was getting at was a practical carrying out of this law. We will have to discuss that with a good many men before we get through with it. Now, you say that the million dollars here mentioned is a minimum. I notice in the next section that a million dollars is contemplated as a necessary amount for the administration of the law, isn't it?

Mr. GREELEY. No, sir; the great bulk of \$1,000,000 would be expended in the States that comply with the requirements set forth by the department.

Mr. TINCER. If the committee could have the proper regulation for some given forest section, with the present occupant of the office who would have the administration of these laws, as a part of these hearings, that would be a great help to us. You can see how we could use that. As a matter of fact, anything that we can authorize you to do under this law we could do ourselves if we knew how, and inasmuch as we are going to authorize you if we pass the law to establish certain regulations for all the forest sections, I would think it would be enlightening to the committee and to the House if you would just pick out some forest section and give us the regulations that you think would be proper in that section. That is, as an example to go by.

Mr. GREELEY. Yes, sir. I can do that.

(The requirements furnished by Mr. Greeley are as follows:)

The requirements which the Forest Service would establish for the pine forests of the Southern States, while not yet finally determined, will be somewhat as follows:

(1) That a stated number of pine seed trees (from two to six per acre, or equivalent number per each 10 or 20 acres) must be left standing and uninjured in cutting, such seed trees to be not less than 9 inches in diameter at breast height, healthy, and with vigorous crowns. Turpented trees or trees containing serious rot or other defects will not be accepted as seed trees.

(2) That all slashings, tops, and other debris under 3 inches in diameter be removed to a distance of not less than 20 feet from the base of the seed trees, and that fire lines not less than 12 feet in width, dividing the cut-over area into blocks of not more than 20 acres in extent, be completely cleared of slashings, tops and any other logging debris.

(3) That cut-over areas be rigidly protected from fire during all seasons of the year for a period of not less than 10 years following cutting, and that thereafter such cut-over areas be rigidly protected from fire during the vegetative season of each year or while the sap is up. Such protection will require a resident fire warden or patrolman for each 10,000 acres of cut-over land, who must patrol the area on every day of fire danger throughout the first 10 years and thereafter on every day of fire danger throughout the growing season.

(4) That all logging engines burning fuel other than oil and employed within 200 feet of woodland or grass land adjoining wooded or cut-over areas must be equipped with cabbagehead stacks (with an inner cone which blocks direct egress of sparks and deflects them into an outer jacket where they are broken into fine particles before emerging from the stack); and that the ash pans of all logging engines and the stacks and ash pans of all steam loaders, skidders, and other steam engines used in logging must be screened at all times with wire netting in good condition and having not less than 2½ openings per inch.

(5) That the firing or burning of timbered or cut-over lands, by the owner of such lands or by other parties, or permitting fires to burn on such lands without extinguishing them, or starting fires or leaving fires unextinguished in the vicinity of such lands by any person whatsoever, be forbidden by the laws of the State under suitable

penalties, with a proviso that the burning of slashings or debris in preparation for tillage or other improvements or as an aid to the protection of timbered or cut-over lands from fire, or for necessary industrial purposes, be permitted under such rules and regulations as a designated executive agency of the State may prescribe.

(6) That the grazing of hogs shall be excluded from cut-over areas which contain one or more seed trees per acre of longleaf pine or 25 or more seedlings or small trees of longleaf pine per acre, for a period of not less than 15 years following cutting.

The requirements which should be followed in this particular region are now under investigation, and the Forest Service is not prepared to define them in final terms. The foregoing will, however, indicate to the committee the general character and scope of the requirements which would be established under the bill with a view to keeping the forest areas of a given region productive.

Mr. GERNERD. Another thought has occurred to me. This is a little bit off the subject.

Mr. TINCHER. Well, this subject is big enough to last a while.

Mr. GERNERD. But I know in my own State of Pennsylvania it has been very seriously discussed. We are very much interested in regaining a lot of these waste lands. We are now getting quite some game preserves, and the idea is to combine the two thoughts. Is there anything possible about that?

Mr. GREELEY. Any connection there?

Mr. GERNERD. Yes; any connection there?

Mr. GREELEY. There is a very definite connection, because it is well recognized by game experts that the preservation and restoration of forest cover and the prevention of forest fires have a very beneficial effect upon the propagation of game.

Mr. GERNERD. Exactly.

Mr. GREELEY. And there are other subsidiary benefits, of course. Opportunities for public recreation will be a very valuable by-product of reforestation.

Mr. GERNERD. The reason I am throwing that out is that you have got to get the public to see this situation; the fellows living in the city who do not know a thing about rural life, who are helping to pay some of these taxes, they have got to see that there is a mighty strong relationship existing between these things, and that is getting to be quite a strong feeling in Pennsylvania, that with this reforestation goes the preservation of game; you go along with your reforestation idea and the other things. The two seem to work splendidly together.

Mr. GREELEY. Yes. The game interests of the country have recognized that very generally. In fact, I know of scarcely any State or National movement toward reforestation that has not the hearty support of the game organizations.

Mr. GERNERD. I know this to be a fact, that in the last 10 years there has been a great change along this line. For instance, just in the matter of deer alone, why, we hardly had any deer running loose in Pennsylvania some years ago. Occasionally we saw a stray one. Yet I understand that this year there were fifty or sixty thousand head of deer that were shot in Pennsylvania alone that have been planted in these game preserves, as we call them. And yet after all, the bottom of it is the reforestation of those lands that formerly had been detimbered.

Mr. GREELEY. Yes, sir.

Mr. TINCHER. Now, I want to suggest to you that one reason I asked you for this outline of the record is that I expect a good many of the members of the committee were interested in your explanation of the forestry laws in Sweden, and in doing that I wish you would put the formula for the administration and the regulation of the law with it, so as to give us as much information as possible.

Mr. GREELEY. All right, sir.

Mr. KINCHELOE. Now, you said a while ago that there would not be any trouble, or that there would not be any danger, rather, of converting cut-over timber land that is suitable for agricultural purposes into land for the rehabilitation of forests. I do not see anywhere in this bill where that power is going to be lodged and who is going to determine that.

Now, in the first section here you go on and say: "That the Secretary of Agriculture, through the Forest Service, is hereby authorized and directed, in cooperation with appropriate officials of the various States or other suitable agencies, to recommend for each forest region of the United States the essential requirements in protecting timbered and cut-over lands from fire, in reforesting denuded lands, and, where and to the extent necessary, in the cutting and removing of timber crops by such methods as will promote continuous production of timber on lands" —

Mr. GREELEY (interposing). "Chiefly suitable therefor."

Mr. KINCHELOE. Yes. Well, now, who is going to say what land is chiefly suitable therefor? Are you going to let the legislature do it, or the Federal Government do it?

Mr. GREELEY. The actual answer has got to be made by each State through whatever agency that State determines upon.

Mr. KINCHELOE. Now, then, after you have appropriated this million dollars you say:

"In the cooperation extended to the several States due consideration shall be given to the protection of the watersheds of navigable streams, but such cooperation may, in the discretion of the Secretary of Agriculture, be extended to any forest lands within the cooperating States."

Now, what I am talking about is section 3. You get down here with a \$3,000,000 appropriation, "to be made available at such times and in such amounts as may be required and recommended by the Secretary of Agriculture for carrying out the purposes of this section."

Mr. GREELEY. That is the section dealing with a comprehensive survey of forest resources.

Mr. KINCHELOE. Yes. The thought I had in mind, as I said a while ago, is this: You talk a great deal of these millions of acres of cut-over land in the South that, of course, will eventually be utilized for agricultural purposes.

Mr. GREELEY. Yes.

Mr. KINCHELOE. And the greatest land in the world when the water is off of it and it is drained. Now, the point I am getting at is this: To whom is the owner of this land going to have to go in order to have his case heard as to whether he wants to rehabilitate that in forestry or convert it into agricultural purposes? Your bill does not tell that. I am just wondering what is in the mind of the author of the bill, or your bureau.

Mr. GREELEY. The only thing that the bill can do in that respect is to lay down the broad principle that it seeks to secure the reforestation of lands chiefly suitable for growing timber. That is the principle in the bill.

Mr. KINCHELOE. I understand that.

Mr. McLAUGHLIN of Michigan. This committee has before it a bill by which the Secretary of Agriculture was directed to survey the national forests, and designate the land that was more suitable for forests than agriculture.

Mr. KINCHELOE. I am not talking about the national forests. I am talking about individual lands.

Mr. McLAUGHLIN of Michigan. That same idea is in the mind of the department and has been operated on.

Mr. KINCHELOE. The point I am making is that there is no provision in this bill to say who is to be the judge of it. For instance, we will say that I own 5,000 acres of land adjoining you. You have 10,000 acres of land. I think mine is more suitable for agriculture than for forest. You may think so or you may not. And I do not want mine to be rehabilitated into forest. Now who is going to say, under this bill, as to whether I am going to be compelled to rehabilitate it into forests or use it for agricultural purposes?

Mr. GERNERD. You keep your land. This bill does not have anything to do with it.

Mr. KINCHELOE. I don't know whether it does or not. It does not say in the bill concerning that. Somebody should have the authority.

Mr. GREELEY. That authority would rest with the agencies of your State.

Mr. KINCHELOE. Under an act of the State legislature?

Mr. GREELEY. Whatever acts the State legislature adopted for the purpose.

Mr. KINCHELOE. Well, I know this bill did not give any authority. I did not know where it would eventually land.

Mr. GREELEY. This bill does not give any authority to the Federal Government to decide questions of that character. They would come up under State agencies and State laws, whatever they may be.

Mr. VOIGT. I suppose there would be something like a public utility board in every State that would pass on such questions as that.

Mr. GREELEY. Yes; or a State forestry board, or an agricultural board. Many States are undertaking the study and classification of their lands, to determine what lands are agricultural in character and what lands are not. Wisconsin, for example, has made a very complete and authoritative classification of her lands. Michigan is now initiating the same thing. The Bureau of Soils in our department has done a great deal of that work in cooperation with the States. In the last analysis the answer to your question would rest with each State as to how far it wishes to legislate concerning the classes of land which should be used for forest purposes.

Mr. KINCHELOE. All right. Now let us go a little further on that point.

Mr. GREELEY. As far as our activities are concerned, we are going to deal with the areas that are unquestionably forest land. We are going to pass up the agricultural lands.

Mr. KINCHELOE. Suppose the State of Kentucky should pass a law and delegate this power to a board, whatever you may want to term it—a board of forestry or whatever it may be. Now suppose that I have some land, or some of my constituents have some land, and suppose that this board should say that it is more valuable

for agricultural purposes, and shall so recommend to the Secretary of Agriculture, to your department, under this bill. Now, supposing that your department, the Secretary of Agriculture, differs with that board, and suppose that the Secretary of Agriculture should say, "I think this land ought to be rehabilitated for forestry." Now, wouldn't you have the power under this bill to withhold that appropriation until that board down in Kentucky complied with your request and made it available for forestry purposes?

Mr. GREELEY. I can not conceive of the power of withholding cooperation being exercised in such an arbitrary fashion. Of course, in the last analysis the Secretary of Agriculture is authorized to withhold cooperation from States which do not comply with or do not carry out what he regards as necessary requirements.

Mr. KINCHELOE. That is the point I am making. Now under this bill he would have the power to say that he would withhold Federal appropriation for that purpose, wouldn't he? Couldn't he do that?

Mr. GREELEY. It is possible, if the State applied no forestry requirements to large areas of land on the idea that they were agricultural and the Secretary disagreed, that he might withhold cooperation.

Mr. KINCHELOE. No doubt about it under this bill.

Mr. CLARKE. Isn't that similar to the provision in the new highway bill, if the States do not keep up the highways, or if the States do not have a maintenance fund? It is the same proposition. There has got to be somewhere a vested power in the thing.

Mr. KINCHELOE. But with regard to the national highway, it is up to the road department of each State.

Mr. CLARKE. You must rely on the good faith of the States themselves; your State or any other State.

Mr. TINCHER. What is the real necessity for that section of the bill calling for the survey?

Mr. GREELEY. In order to get much more exact and complete information upon the needs for timber in the various parts of the country and by various industries; the amount of timber that we have of each class and kind; and the timber-growing capacity of each region. It is not the sort of thing that we should wait for before enacting Federal legislation, but it is something that we ought to get in order to have a much more complete and accurate understanding of the situation.

Mr. KINCHELOE. You mean section 4?

Mr. GREELEY. Section 3.

Mr. TINCHER. My question was brought on by listening to your very accurate statistical explanation of the very thing that that survey would call for; in your testimony you had practically all that information.

Mr. GREELEY. We have assembled the best information that we could get, Judge Tinch, and have presented it in various forms, including the facts that I gave this morning. But that investigation shows that a study of the economic situation ought to be made much more completely and thoroughly than has yet been possible. That is all there is to it.

Mr. CLAGUE. I regard that as the best section you have in that bill, the most essential.

Mr. VOIGT. Where did you get your statistics, Col. Greeley, that you gave to the committee awhile ago?

Mr. GREELEY. From the report which the Forest Service submitted to the Senate last year under the Capper resolution.

Mr. VOIGT. Has the Forest Service undertaken to get any statistics on timber waste?

Mr. GREELEY. To a limited extent, sir, and also on the production of timber products.

Mr. McLAUGHLIN of Michigan. Well, will you or somebody speak on your side of the bill in order to give us any help on the constitutional features of the bill? That is one of the first things that the committee will have to determine.

Mr. CLARKE. Mr. Snell ought to be here for that part of it. I think he ought to speak on that.

Mr. McLAUGHLIN of Michigan. You may remember that when the Weeks bill was passed by act of March 1, 1911, it was proposed to provide money for the purchase of various lands for forest purposes, and the question was raised as to the power of the Congress to acquire land for that purpose. It was referred to the Committee on the Judiciary of the House, of which Mr. Jenkins, of Wisconsin, at that time was chairman, and he made an elaborate investigation and a report to the effect that the Congress had no right to purchase lands for forest purposes; that it had a right to purchase it only for the purpose of protecting the watersheds of navigable streams; and a portion of the Weeks Act is quoted in this bill: "For the protection of watersheds and navi-

gable streams, for the purpose of conserving the navigability of navigable waters." In effect the Congress approved the finding and the opinion of the Committee on the Judiciary at that time—that it had no authority to purchase lands for forest purposes. Now, evidently that question has occurred to you gentlemen, and I suppose some investigation has been made on it, and you will be able to present a brief here and make an argument to this committee on that side of the question. It may be desirable to do that.

Mr. GREELEY. I did not contemplate attempting to present that, Mr. McLaughlin, because I do not feel competent to discuss it. I think it would be very desirable to have that subject covered either in the verbal hearings or in the form of a brief for incorporation in the printed record.

Mr. CLARKE. Mr. Snell, in the framing of this bill has anybody been consulted with reference to that?

Mr. SNELL. I must say that that particular proposition has never been presented to me. If there is anything along that line we will have that looked up and present the facts to the committee.

Mr. McLAUGHLIN of Michigan. Anyone at all familiar with the legislation that has gone before must have considered that constitutional question. I notice that section 7, as I understand it, authorizes the Secretary of Agriculture to fix prices, to purchase lands chiefly suitable for forest production, whether the control of such land shall promote the protection of navigable streams on whose watersheds they lie or otherwise. If that should become a law it would operate as an amendment of the act of March 1, 1911, known as the Weeks law. Fifty million dollars is authorized to be appropriated for that purpose, so as far as money is concerned, it is a very large feature of this bill, and the constitutional question confronts us at the very beginning. It seems to me that some of you gentlemen ought to have considered that and been prepared to help the committee.

Mr. GREELEY. That is a question that has been referred to a number of attorneys. The consensus of their opinion is that the functions provided for here are within the constitutional authority of the Government, but those opinions are not unanimous, there being some to the contrary. I think an arrangement should be made to have a thorough-going brief on that subject presented for the use of the committee.

Mr. TINCHER. Oh, we do not want a brief: we want real lawyers to come here before the committee. We want to talk to them. This committee has a pretty good reputation for constitutional lawyers. Our laws are being upheld. The Federal court out in Illinois cited the hearings in one of our cases when we went into the legal propositions as showing that the committee had the Constitution in view.

Somebody that had something to do with this bill evidently had the idea of going forward, for section 2 provides, right at the end of it, that such cooperation may, in the discretion of the Secretary of Agriculture, be extended to any forest lands within the cooperating States. That is right after the paragraph about the watershed. So it has evidently been decided by someone to go further than Congress has hitherto thought we could go.

Mr. GREELEY. Yes; that is definitely contemplated—to go beyond the limits of navigable watersheds.

Mr. KINCHELOE. Mr. Greeley, has this bill been referred to the Solicitor for the Department of Agriculture?

Mr. GREELEY. It has.

The CHAIRMAN. What is the desire of the committee as to proceeding further at this time?

[After informal discussion.]

Without objection, the committee will stand in recess until 2 o'clock this afternoon.

(Thereupon, at 12.20 o'clock p. m., the committee took a recess until 2 o'clock p. m. of the same day.)

AFTER RECESS.

The committee resumed its session at 2.30 o'clock p. m., pursuant to the taking of recess.

The CHAIRMAN. Mr. Snell, whom do you desire to have heard next?

Mr. SNELL. When we adjourned for luncheon, Mr. Chairman, Mr. Greeley was on the stand, and there are several members of the committee who desired to ask him questions. He is not here now, however, but he will return and appear before the committee later. We will continue now by calling upon Mr. Long, who is chairman of the forestry committee of the National Lumber Manufacturers' Association.

The CHAIRMAN. Mr. Long, we will be pleased to hear from you.

STATEMENT OF MR. GEORGE S. LONG, REPRESENTING THE NATIONAL LUMBER MANUFACTURERS' ASSOCIATION, WASHINGTON, D. C.

Mr. LONG. Mr. Chairman, the National Lumber Manufacturers' Association is an association composed of all the different lumber associations throughout the United States, including, I think, every important wood, every important producing region, and covering the whole gamut of lumber production. The association includes the Southern Pine Association of the South; the Mississippi Valley Association, which in the long past has been known as the White Pine Association; the Hardwood Association, representing the hemlock and the hardwoods of the Upper Peninsula of Michigan and Wisconsin; the Cypress Manufacturers' Association, the Western Pine Association, operating in Idaho, Montana, and eastern Oregon; the West Coast Lumber Manufacturers' Association, which covers the fir region in Oregon and Washington; the California Association, representing what they call the California white pine and sugar pine, and the Redwood Lumber Manufacturers' Association; also what is known as the Western Forestry and Conservation Association.

In the ranks of these allied associations is represented the ownership, practically, of all the commercial timber in the United States other than that which is held in State and in national reserves. So that when the Lumber Manufacturers' Association voices its sentiments here to-day it practically represents the private ownership of the timber known as commercial timber in the United States.

As was stated by Congressman Snell in his introductory remarks, this specific topic of future lumber supply was called directly to the attention of the lumbermen by Forester Graves, when he was United States forester, asking for the cooperation of the lumber fraternity in the movement. His successor emphasized that same request in a subsequent series of presentations of the case before the different lumber associations and timber people generally, with the final net result that the National Lumber Manufacturers' Association suggested to each of its regional memberships the appointment of committees on forestry matters in each association to help solve the question of what was the best forest policy for each district. After those committees had been organized for some time, the national association appointed a forestry committee, of which I happen to be a member, and that committee met with the others who have been mentioned here by Congressman Snell in the formation of the so-called Snell bill.

I must confess that after hearing Mr. Greeley this morning it seemed to me there was so little to be said that is pertinent by any lumberman that I must fail to enlighten you very much or even to interest you in the general topic. It is no new story that we are facing, gradually and by degrees, a lumber shortage in the United States.

Attention has been called to it at different times in the past 40 years, sometimes more acutely than at others, but yet steadily and persistently, that the American people were facing a day when there would be a lumber shortage. We as a nation have grown somewhat indifferent to the situation, because many of those early predictions were not at all true to the mark; they were too wild. The man who said 40 years ago, as was said in the Halls of Congress, that this country would be without saw timber within a few years, certainly made a great mistake.

As late as 1890, in a census report, I recall that the estimate was made, because at that time I had just become acquainted with the white-pine industry of the upper lake region, that there was then in Michigan, Wisconsin and Minnesota probably—not certainly, but probably or possibly—25,000,000,000 feet of white pine. Since then there has been cut 100,000,000,000 feet of white pine in that region.

As late as 1907 an official statement emanating from the Department of Agriculture stated that at the then rate of cutting the timber resources of the United States would be exhausted in 25 years. That statement was made 14 years ago, and of course that threw quite a scare into people generally. It fell with a little less force upon the ears of lumbermen, because they felt it was not true. Somewhat as a reflex of that statement, somewhat as a result of it, the Bureau of Corporations were requested to make an inventory of the timber resources of the United States, which was done in 1908 and was done probably somewhat carelessly, but much more thoroughly than anything of that kind had ever been done, with the net result that their figures showed in the United States a total of two thousand five hundred billion feet of timber. And two thousand five hundred billion feet of timber is, I think, somewhat conservative, or was at that time. And, gentlemen two thousand five hundred billion feet of timber on hand in 1908 was more lumber than the United States had consumed as lumber since prior to the days of the Revolutionary War. So instead of our timber resources being exhausted, while we are depleting them, they are not gone.

Mr. CLARKE. What is the annual average consumption of timber in the United States, roughly speaking?

Mr. LONG. The average annual consumption of lumber in the United States reached a peak 10 or 11 years ago of about 45,000,000,000 feet. Since that time it has been decreasing. I think the last statement that has been prepared on that subject shows an annual consumption of 32,000,000,000 feet of lumber. And while we are increasing our population we are decreasing the annual amount of lumber that we are using and very materially decreasing the amount per capita of lumber that we are using.

Mr. CLARKE. Is that due to the increased use of steel and concrete and terra cotta and other building materials?

Mr. LONG. I think it is, very largely, and the manifold increased opportunity for those substitutes to enter the field. Sometimes it is economy—

Mr. CLARKE. Is not economy the fundamental basis of it, or part of it at least?

Mr. LONG. It is largely economy. Of course as we travel along we learn that some things are better than wood. It is a statement that lumbermen do not indulge in very much, but it is true that concrete is better than wood in many cases, and undoubtedly it has taken its place very generally in thousands of different ways. So that we are not only increasing our population—as we are, of course, slowly now in the United States—but we are decreasing our total annual consumption of lumber quite materially, and I think that is going to be a constantly growing factor.

I suppose Mr. Greeley told you—I have forgotten whether he stated it this morning—that our annual consumption of lumber in this country to-day is about 300 feet per capita. In France and in England it is about 90 feet per capita. I think in Germany it has been about 150 feet per capita. So that it is possible for a nation to exist without a very lavish use of lumber, although I think the true economy of the use of this natural resource is to use it as freely as we need it.

Our people, from their original environment, became users of lumber naturally. The first settlement of the United States landed people on a coast that was forested. The timber was a menace instead of an asset, and there was more timber destroyed by the ax and by fire, to clear the ground for agricultural purposes, in the first 200 years of American life than was used for any purpose, and that thing continued for a great many years. As a matter of fact, the lumber business as a business for profit never assumed any proportions even prior to the days of the Civil War—not to amount to much. About all any man got out of the business prior to the Civil War was simply a return for ordinary day labor. Wherever a man wanted to build a house or a bridge or a fence, there stood a tree. The conversion of it to his use was simple, natural, logical. He became a very free user of wood, and he continued so by preference.

Then again, as the country developed, even in a region where there were no trees—take, for instance, the prairie country of Illinois, Iowa, the Dakotas, Nebraska, and Kansas. There probably has never been in the history of the world an instance of a territory without trees so favorably placed with reference to a forest that stood near it; where the trees were so easily converted into lumber and economically placed in the hands of the user. The forests of Michigan, Wisconsin, and Minnesota were penetrated by streams that flowed down into that prairie country. There has never been at any time or place a means of transportation that admitted of the economy of delivering the board from the forest to the consumer as economically as in those old days of lumbering in Wisconsin, Michigan, and Minnesota.

Mr. CLARKE. That was by rafting?

Mr. LONG. By rafting and by lake transportation as well. For instance, the cost of bringing a sawlog from the heart of Wisconsin, floating it down the Mississippi River as far south as St. Louis, was less than \$1.50, I think, for 20 years in the history of the lumber business. That took that tree down to the very heart of the country that had no trees, with the result that all up and down the Mississippi River, as far south as St. Louis, at Hannibal, Mo., Quincy, Ill., Muscatine, Iowa, Davenport, Rock Island, Dubuque, La Crosse, and Winona grew up great lumber producing centers, because the lumber was floated down. That was the most economical transportation of the trees from the country in which they grew to the region that had no trees that we have ever known.

The contrast between the price of lumber in those days and the price to-day startles one, of course. I can recall as far back as 1896, 1897, and 1898 when we were selling lumber delivered in Des Moines, Iowa, at a wholesale price of \$16 a thousand to the dealers. That price obtained for four or five years. It now costs more than \$16 a thousand to pay the freight alone on lumber from the inland empire or from the west coast to Des Moines, Iowa, and relatively that same condition obtains with reference to lumber transportation from almost every region. The southern pine is still nearer the Mississippi Valley and nearer the Atlantic coast than our far western timbers.

Mr. KINCHELOE. That prohibitive freight rate hits practically every commodity to-day, does it not?

Mr. LONG. I do not think it does relatively, sir. Ninety per cent of the steel production of the United States is consumed within a few miles of where it is produced.

Mr. KINCHELOE. But it hits agricultural products, does it not?

Mr. LONG. I think it does.

Mr. KINCHELOE. Absolutely.

Mr. LONG. It is absolutely the same proposition.

Mr. CLARKE. How is the water transportation down through the Canal? Does that have any effect?

Mr. LONG. The water transportation from one coast to the other is going to have a marked effect eventually, so far as serving the cities immediately on the coasts.

Mr. JONES. Is there any considerable proportion of lumber made in this country being exported now?

Mr. LONG. No, sir; not a considerable proportion. I should say, taking it generally and applying it to the entire lumber production, it probably would be less than 10 per cent.

Mr. JONES. Do the exports of lumber exceed the imports?

Mr. LONG. I think so—and I should consider the lumber coming from Canada as import. A good deal of lumber comes from Canada that pays no duty, but I would not be so sure about that. We are importing largely our high grade lumber for furniture—mahogany, and things of that kind—and a good deal of the soft lumber from Canada also comes in.

Mr. KINCHELOE. And spruce wood is imported to a considerable amount, is it not?

Mr. LONG. Quite a good deal of mountain spruce comes from Canada, for paper. Do you refer to lumber or to pulp?

Mr. JONES. I referred particularly to lumber; I did not have pulp in mind.

Mr. CLARKE. Is there not, as a general proposition, a distinct advantage in exporting lumber from Canada into the United States as against exporting lumber from the United States to Canada, because of the difference in the exchange?

Mr. LONG. The United States currency being worth 18 or 20 per cent more, that has been true of late.

Mr. CLARKE. It is an abnormal condition, I realize that.

Mr. LONG. The situation now is that Canadian lumber comes over all of our frontier free of duty, and we have to pay duty on much of the lumber that we ship into Canada.

Mr. KINCHELOE. Let me ask you this. Have you any statistics, and if so, what are they, to show how long the present lumber supply of the United States would last under normal consumption, taking into consideration at the same time the present activity in the direction of reforesting the country?

Mr. LONG. That is a very difficult question to answer. We have 2,500 billion feet of timber in this country, and our annual consumption of lumber is 35 billion feet, so you might say it would last 70 or 75 years. That includes the total resources of timber in the United States.

The CHAIRMAN. What is the annual growth or production?

Mr. LONG. Well, I would rather you asked that question of Mr. Greeley, because I do not know.

Mr. KINCHELOE. I started to ask the gentleman this morning—

Mr. LONG. I understand he says it is about 20 billion feet a year.

The CHAIRMAN. The shortage, then, is about 15,000,000,000 feet every year?

Mr. LONG. Yes, sir. Of course, we will undoubtedly grow as a country; 50 years from now we may have more people.

Mr. KINCHELOE. It will depend, of course, on the relative consumption. Of course, the lumber consumption will be greater, too?

Mr. LONG. Yes, sir. But in my judgment, gentlemen, the substitutes have hardly got started yet. I think you will find that the substitutes are going to solve this problem to a much greater extent than we have yet realized. I am quite well convinced in my own mind that whenever the steel industry fairly wakes up to the fact that they have to enlarge their market, when they find they have to have a market, they will be going after things that will make the lumber men sit up and take notice. There is no reason why steel can not be produced in small units, assembled in sizes to put up the frame of a house, and shipped anywhere a man wants it. In fact, today at Youngstown there is a resumption of activity on the part of one steel plant that contemplates that very thing. They started to do it prior to the war, and the war diverted their activities in other directions.

Mr. CLARKE. Does not the same answer apply as far as the steel industry is concerned? You take the iron-ore deposits of the United States to-day, and, based on

present consumption, you will find that the life of the commercial iron ore, as we now know it, is about 30 or 35 years.

Mr. LONG. That is the record, is it?

Mr. CLARKE. Oh, yes; that is a matter of fact. Take these rich deposits of the Cuyuna and Vermillion Ranges, which are, of course, the greatest deposits of merchantable iron ore in the world; their life is predicted to be only from 20 to 22 years. So of course they are in just the same situation in the iron ore industry that you are in the lumber industry. Up in Mr. Snell's district there are billions of tons of magnetic iron ore, and large quantities of it that are not commercially usable now. So that competition in time will disappear.

Mr. LONG. Of course the timber, fortunately, can be replaced; the iron ore can not be.

Mr. KINCHELOE. I would like to have your opinion—I am sure you have given the matter a lot of study—of what is the best procedure to rehabilitate the forests of the country; whether the Federal Government should interfere; and if so, in what way?

Mr. LONG. It seems to me, gentlemen, such a simple question that we should not give it a second thought, hardly.

Mr. KINCHELOE. You mean that question is?

Mr. LONG. No; I mean the general question.

Mr. KINCHELOE. I was going to say it is not simple to me at all.

Mr. LONG. Here we are, undoubtedly, in possession of a land and a country that has had the greatest forests in the world. I suppose the hardwood forests of the United States far surpass any hardwood forests that we know of in the world. There is no other country that has developed the same quality of timber in the soft woods that we have. We still own that land. We still have that climatic condition that will grow a forest. We still have—if the figures given you here this morning are correct, and I think they are—millions and millions of acres of land that can grow another forest. Now, we are facing the possibility of a dearth of timber. We know it will grow. We know we have the land; we know we have the climatic condition to build it up, and all we have to do is to use a little common sense and get busy and grow another forest. Now, the only question that bothers us is, Who shall do it? Whose job is it?

Mr. CLARKE. May I interrupt you right there? Is not that only part of the problem? How much cooperation has there been on the part of the lumber dealers or lumber manufacturers, the men who have gone in and cut down the trees, in the direction of conserving the forests and utilizing the products, preventing the danger of fires, and all that? How far have they cooperated? I know, of course, that in my own little neck of the woods they have done a great deal, but I do not know about the general situation.

Mr. LONG. I think the general history of the past has been that everybody has looked after his own little bailiwick to a certain extent.

Mr. CLARKE. Do you mean to say that they have generally been unselfish and have been forward looking in their attitude of conserving and utilizing? I think they have been the most wasteful and extravagant gang of profligates the world has ever seen.

Mr. LONG. In the cutting of their timber?

Mr. CLARKE. Yes.

Mr. LONG. Well, what would you think of a man who has got a property that he is converting into dollars and who burns those dollars up and throws them away?

Mr. CLARKE. Well, it may be that the immediate use of the dollar has been the big consideration with him—to get the dollar to-day while the demand for the product is good—not looking ahead.

Mr. LONG. You can not take a tree and utilize it for anything while it is living; you have got to devote it to a purpose. You can not drink it like a bottle of champagne. I do not think anybody has ever deliberately wasted what he thought was his own asset. He may not have looked at it in a broad way, but I think that everybody, when he comes to his own profit, tries to get out of it the most that conditions will permit at the time.

Now, there is something about cutting down a tree, something about the debris that is left on the ground, something about the general appearance of a devastated forest that looks horrible. It strikes everybody that has looked upon the original timber as a horrible action. I suppose if we had Hindoo blood in our veins instead of Anglo-Saxon we would be horrified when we saw a delicate lamb killed for a lamb chop, or when a steer is butchered. All those things mean death and destruction, but we do not see them standing in the open where they look bad. But the cutting down and utilization of a tree is just as necessary as the taking of the life of an animal for food or the cutting of a beautiful field of grain for the grain that is in it. There is the devastation that follows any realization of a crop. The lumberman's devasta-

tion stares you in the face. You see things there that look like waste, but I do not know any level-headed man that leaves a dollar's worth of tree in the woods that he can take out and get a dollar for.

Mr. KINCHELOE. Don't you think there has been a great waste where timbermen go in and buy a tract of timber—just buy the timber of a certain diameter and over, and saw those trees, having no regard in the world for the young timber that is there. I know there is in my country.

Mr. LONG. It might be so, sir, in your case, and I do not question but what that may be so generally.

Mr. CLARKE. And then as the next step in that proposition they come in there and buy this timber, and the thing they are thinking about is getting that timber out the quickets and cheapest way they can; they are not thinking of the dangers they leave behind, the danger of fire burning this young and tender timber.

Mr. LONG. No doubt there is a great deal of truth in that statement, but does not that pertain to nearly every walk of life where a man does not fully utilize his opportunities to conserve? I do not think the lumbermen are any more guilty than people generally are.

Mr. CLARKE. I am not indicting them as an industry.

Mr. KINCHELOE. I am interested in the premise you started to lay down a moment ago about this timber proposition.

Mr. LONG. You asked me what they had done to cooperate?

Mr. KINCHELOE. Yes; and what we are particularly interested in here is anything that will help us in framing this legislation.

Mr. LONG. Well, starting again with my original idea, we have got to build up a policy. We have got the material to restock these forests; we have the soil, we have the climate, we have the land that can be spared from agricultural purposes. The question is: How shall it be done, and who shall do it? That is the main question.

Mr. KINCHELOE. Yes; I would like to have your idea about how best to do it.

Mr. LONG. Of course you people who have lived in Kentucky and Tennessee and in the eastern States and middle Atlantic States, have not been alongside of the national forests that have been created in the last 20 years. I come from the far West. Sprinkled through all our timber areas there are Government forest reserves, and in that country to-day, according to the best authorities we have, stands at least 55 per cent of all the available timber in the United States. The most serious danger to the standing timber to-day is the devastation from fire.

The lumbermen in that country have worked very harmoniously with State and Federal authorities in fighting that menace. They have put up just as much money as anybody else has done. They have led the procession. They have divided the territory. They have done everything, I think, that they could do to keep away that most serious menace to the standing timber. In the State of Washington, from which I hail, before the State ever made an appropriation of one dollar for fire protection, the timbermen got together and organized the Washington Forest Fire Association. Upon our initiative we got the legislature to pass a bill pertaining to forest fire protection and to organize and build up a forestry machine of its own in the State of Washington. For the first year under that they appropriated \$10,000 to carry on the work for two years. They spent all of it the first year, and the consequence was the lumbermen put up the money to keep that machine working.

To-day the lumber people in the States of Oregon, Washington, California, Idaho, and Montana are putting up annually close to a million dollars from their own funds for forest fire protection. They are putting up twice as much as those States themselves are putting up. They are dividing the work with them. They meet with the State foresters. They meet with the Federal service. They sometimes swap territories. We cooperate with the State foresters everywhere in that line of work. That is one type of cooperation.

I might speak of another little incident that comes right home to me. In the past three or four years there has developed in what we call our western pine district, especially in eastern Oregon, an insect pest that looks like it may be very destructive to the forests. In the forest that is situated in what is known as the Klamath Lake district there is probably 75,000,000,000 feet of western pine. It is just about equally divided between forest reserves, Indian land, and private ownership. For the past two years there has been a study made of that pest and the best way to treat it, and recently Congress has made an appropriation, saying it would match its funds against those of private individuals to stamp out that pest.

A week ago to-day I was in Portland, Oreg., where there met around a table like this the representatives of private owners, representatives of the Government Forest Service, representatives of the State of Oregon, and the trained representatives of the Bureau of Entomology, to work out a plan to solve that problem.

Mr. CLARKE. What is that pest? What is its name?

Mr. LONG. I can not tell you the name of the insect, but it is an insect that lights on a tree and kills it. Mr. Allen, do you know the name of that?

Mr. ALLEN. It is generally called the pine bark beetle. Scientists say Dendroctonus.

Mr. LONG. We entered into a tentative agreement there, whereby a million acres of that tract would be treated in the next two years. It is about equally divided between private ownership and forest reserve land. They appointed a board of control to handle the whole proposition. One member of that board of control is from the Forest Service, another member is from the Department of the Interior, a third is from the Bureau of Entomology, and a fourth is from the private ownership.

No phase of that work is to be undertaken that does not first meet with the technical requirements of the Bureau of Entomology. We are working with them direct, or trying to. We contemplate spending this present season \$150,000 on that work and \$150,000 next year, and beyond that we do not know how much. But we are going to stamp out that pest.

Mr. JONES. Can you not do this work just as well without this additional national legislation? You are not handicapped in that work, are you, by virtue of the lack of legislation of this character?

Mr. LONG. Decidedly so. That is a case very much in point.

Mr. JONES. In just what way?

Mr. LONG. For instance, we will assume the Government owns that land [indicating on the table], the Indian reserve has that, and the private owner has that. It does no good to stamp out the insect infestation on that piece of land there [indicating the middle tract] unless you do it here, and unless you do it there.

Mr. JONES. Is the Government failing generally to take care of its land?

Mr. LONG. Yes, sir; absolutely. And the private owner is the one that initiated this movement. The private owners went before the Legislature of Oregon last winter and got a bill passed authorizing the State of Oregon to take the initiative in declaring that zone to be an infested zone that had to be treated. Then we went direct from there to the Forest Service and asked them to join us in an effort to suppress that menace to our timber.

Mr. JONES. And they are not doing anything to suppress it?

Mr. LONG. They have not done anything except to make examinations.

Mr. JONES. Well, they have authority under the law to do it, have they not?

Mr. LONG. They have not the money.

Mr. CLARKE. It takes appropriations?

Mr. JONES. All they lack under the present law, then, is an appropriation?

Mr. LONG. I think so.

Mr. JONES. They have an organization to handle the matter?

Mr. LONG. They could handle their own, but how could they handle ours? And what is the good of handling their own unless they handle ours? I am talking on the point of cooperation. That work ought to be done jointly, at the same time.

Mr. JONES. Can you not do it in cooperation with the States and let the Government take care of their own?

Mr. LONG. If they all worked together at the same time; yes, sir.

Mr. JONES. Is it your idea that the National Government should assume the entire control?

Mr. LONG. The entire control of this particular question here?

Mr. JONES. Yes; say of this particular question.

Mr. LONG. Not at all. We sit around the table, all three of us, and conscientiously, man to man, attack the problem and decide the best way to handle it. We want just as much voice in that as the national people have, because we have in that locality just as much interest, and we think we know a lot of things ourselves.

Mr. JONES. But what if you fellows disagree with the Secretary of Agriculture or with his department?

Mr. LONG. Then we do not work; that is all. But we should agree.

Mr. JONES. Under the terms of this bill, though, you would have to agree with him or you would not get the appropriation?

Mr. LONG. That is true.

Mr. JONES. He has to lay down the rules and regulations?

Mr. LONG. He has to suggest them.

Mr. JONES. And he is authorized to withhold the appropriation unless you agree to do as he wants to do?

Mr. LONG. That is very true; but we have learned to think of him not as a man who sits away back there in Washington—

Mr. JONES. But that is where he sits, just the same.

Mr. LONG. Well, he has some man that stays out there that listens to us.

Mr. JONES. Are you not in a better position than he is—I mean men like you who are doing the work and whose interests are there—to know what is best to do, in the ultimate analysis?

Mr. LONG. Well, I think they bring to our councils technical information that the average lumberman does not have much to do with.

Mr. JONES. Well, should they not be limited really to information and education, if they may extend anything along that line, and leave the practical operation and carrying out to the rest of you?

Mr. LONG. You are speaking now with reference to the terms of the Snell bill, are you not?

Mr. JONES. Yes.

Mr. LONG. I cited that as an illustration of cooperation.

Mr. KINCHELOE. The point Mr. Jones makes there is this, that so far as the law is concerned is it not already sufficient for that cooperation, except, as you say, the appropriations are not large enough? If Congress should make this sufficient appropriation to carry out that work, what other provision would you need?

Mr. CLARKE. Unity of plan, and continuity of plan.

Mr. JONES. Yes; and when you have continuity of plan you have to turn it over ultimately, under this bill, to the Government?

Mr. LONG. This is my idea about this reforestation problem—not specific as to any method—that you have got to enlist in that game every conceivable means. You have got to get the Government to work. You have got to get the States to work. Possibly you have got to get the municipalities to work. Certainly you have got to get the lumbermen to work, and you have got to get the people to work. You are never going to carry out any program of law on this subject that is going to be effective unless you get everybody working. And I have great faith, from what I have seen of the United States Forest Service, that they will work with us. Sometimes we say that they are so technical that we can not do business with them, and we have found a few things about the forest service work that are so technical that they are not practical. But on the other hand, they have brought to us a great many ideas that we did not have before, and it is the blending of the rough-neck knowledge that lumbermen have that know how to do the work and knowing what results are, mingled with their technical information, that gives us a wholesome practical working scheme.

Mr. JONES. With an adequate appropriation, though, you can have that blending now and get their ideas and suggestions, can you not, if they had money enough to carry out their plans under the present law? Could they not furnish you those ideas and that information that you could, with your practical knowledge, apply without the additional legislation that is carried in this bill?

Mr. LONG. Mr. Greeley's idea of the whole question of reforestation is that about 75 per cent of it relates to the question of keeping fire out of your timber. He said so this morning. He is hanging up a purse there, virtually saying, "If you people will match that with an appropriation and really do practical work in keeping fire out of the timber, we have got the forestry subject pretty well covered," because, in his judgment, that is 75 per cent of the whole question.

Mr. JONES. But it seems to me that the larger part of the appropriation is in connection with another matter. I do not know that I understand him fully—

Mr. LONG. The acquisition of land?

Mr. JONES. The acquisition of land and the protection of watersheds of navigable streams, etc. That carries a total appropriation of \$50,000,000, and these other appropriations are \$1,000,000 annually.

Mr. LONG. Mr. Jones, there are two viewpoints about providing for the supply of timber. One school thinks that it largely turns upon the conservation and utilization of that which you have; that that in itself would solve the problem. Other people think you ought to be growing another forest.

Now, I think there are places in the United States, particularly in connection with the use of the wood for pulp, where it is possible for the private individual to grow a forest profitably, because in pulp wood you do not have to mature a full-sized tree. All you need is a reasonable-sized block that you can grind. A growth of 15 or 20 years of spruce will give you a proper piece of wood to grind into pulp. But you can not make lumber that way.

When you come to grow a forest that is to take the place of a forest that we now have in the South or in the North or in the far West, that yields the sizes and the qualities that we now get out of those forests, you can not do it in 15 years. You can not do it in 25 years. You can not do it in 50 years. There is no financial scheme that I have ever heard of whereby any private individual or any corporation can afford to take raw land and grow a forest that is going to mature 75 years from now and ever get one-half of its money back again, on account of the tax laws.

You have got to educate the public. I am talking about a new forest. It is for the future. You have got to educate the public and enact laws that will endeavor simply to do that.

My own thought is that it should be done by the State and by the Nation; let them grow these forests, and let them pay for it, and let the public get the full benefit of it, because it is not possible for any private enterprise—certainly not anywhere west of the Mississippi River, there is no human possibility of any private enterprise growing a forest and receiving one-half of its money back again.

Mr. JONES. You think it would take the Government many years to do that; to tide over the intervening years?

Mr. LONG. Yes; to reproduce such forests as we have on the Pacific coast, and they are the ones I am more familiar with, and therefore I harp on them more. To reproduce such forests as would lend themselves to heavy structural treatment, it takes many years to grow a forest of that kind. These woods are woods that lend themselves to such structural treatment, and they are also woods that lend themselves to fine finished products. But you can not grow a tree like that in 25 years; you can not grow a tree big enough to make a 12 by 12 in 25 years; you can not grow a tree big enough for the keel of a ship in 50 years. So that we may not be able to replace a forest like that in 100 years or 150 years, but there are thousands of things that lumber is useful for that almost any kind of a forest will supply. You know the kind of boxes that the New Englanders are using. You look at the ordinary dry goods box that comes from Boston, and you will see that it is made of material 2 or 3 inches wide, and such wood will reproduce itself in 25 years, and for that purpose it is an excellent wood.

But you undertake to reproduce the hardwood and you have got to have age and time. And there is no law on any statute book that I know of, or any tax law, that would make it possible for any private enterprise to carry on that interest. I am perfectly willing to try it, but I want the assistance of the Government and the State to finally develop in the public sentiment an idea that they will stand for that kind of taxation—that will make it possible for a private individual to do it—and when it is possible, I think you will find the great mass of lumbermen will be willing to undertake it.

Mr. GERNERD. Pardon me there. Do you think that private enterprise would be frustrated by the uncertainty of life or the certainty of death?

Mr. LONG. Do you mean of the tree or of the man?

Mr. GERNERD. I mean of the man. I mean, coming down to the practical discussion of the matter and from the private standpoint.

Mr. LONG. Well, that is in the domain of the theory that a man only wants to work for that which he is going to realize himself. You have got to get away from that idea if you want to grow a new forest. You have got to get away from that idea. The individual has got to get away from it and the country has to get away from it, and you have all got to work together to create a great, big public sentiment, as you, I believe, suggested this morning; and you have to get the game people interested in it from a sentimental standpoint to help you build up your reforestation. You are not going to build up a great big reforestation in this country unless everybody is in favor of it and working for it.

Mr. GERNERD. Exactly; and that is the reason I put the question to you as to whether it will be possible to have reforestation if the private individual is not to have any benefit. It has got to be along national lines.

Mr. LONG. I think so, yes. But you can not get it, even on national lines, until you get everyone in favor of it. And I think that the man who will not back up reforestation simply because he is not going to get any benefit from it personally is a poor citizen. And I think that the lumbermen have the right sort of men in their ranks, and I speak for a very large crowd that I believe would be glad to do it.

Mr. GERNERD. I am very glad to hear that.

Mr. JONES. Mr. Long, how many members are there in the National Lumbermen's Association, approximately?

Mr. LONG. I think there is a gentleman here who can answer that question, approximately. Is Mr. Rhodes here?

Mr. RHODES. There are 12 associations.

Mr. JONES. Do you know how many individual members you have in each of those associations, or approximately what the total membership is?

Mr. RHODES. I simply state it from memory, but I think that the combined membership of the association in the affiliated organizations is about 2,000.

Mr. JONES. About 2,000?

Mr. RHODES. Yes, sir.

Mr. JONES. Now, what percentage of the lumber resources of the country is represented in those 12 associations? Can you give approximately the figures on that?

Mr. RHODES. I think Mr. Long could tell you.

Mr. LONG. Our census gives 34,000 sawmills in the United States. The lumber production, however, consists of members of the association representing a very much greater proportion of the production, probably between 30 and 40 per cent. I doubt if it is 50 per cent of the production of the country.

Mr. JONES. Another question: That is, if most of the timber represented by the members of this organization is owned by the individuals, or do they simply lease it for a period of years; generally speaking, I mean?

Mr. LONG. Generally speaking, they own the land.

Mr. SNELL. They generally own the fee simple title?

Mr. LONG. I think 75 per cent of them own the fee simple title.

Mr. GERNERD. Let me put another question to Mr. Rhodes: I asked you how many individuals were interested in the association; how many acres of timberland do those 2,000 member represent?

Mr. RHODES. That is a hard question to answer.

Mr. GERNERD. I am more interested in the number of acres that they own than I am in the number of individuals. I know of three fellows that own pretty nearly half of Idaho.

Mr. RHODES. I don't know that that has ever been given.

Mr. CLARKE. Compare that with the acreage that the Government owns.

Mr. GERNERD. That would give us some idea of the extent of the private ownership of the land.

Mr. JONES. How much is there of timber land in the United States? Do you know, Mr. Long?

Mr. LONG. I think that is in Mr. Greeley's report.

Mr. JONES. If it is in the record, I will not bother you to take the time to look it up, if it is in the record already.

Mr. SNELL. It is in the record.

Mr. LONG. By the way, I have a copy of that report, and I think it is intensely illuminative on that subject. The total acreage is about 460,000,000.

Mr. SNELL. Mr. Long, did I understand you to say in the early part of your testimony that this National Wholesale Lumbermen's Association really represented or controlled practically all of the privately-owned timber lands in the country?

Mr. LONG. That is my opinion; yes, sir.

Mr. SNELL. That is what you are trying to get?

Mr. JONES. Yes; that is what I tried to get.

Mr. SNELL. That is what Mr. Long said, that his organization owned or controlled a very large proportion of the privately owned timber lands of the country.

Mr. LONG. Yes; a large proportion.

Mr. GERNERD. That is, of the land which it is really worth while to operate on on a large scale?

Mr. LONG. When I tell you that 55 per cent of the timber is west of the Rocky Mountains, and of that 55 per cent 100 per cent, outside of the Government lands, is represented here, it is a large proportion.

Mr. SNELL. You see, it is a very large proportion.

Mr. GERNERD. I was under that impression, that it was a large proportion, but I did not know it was to that extent.

Mr. KINCHELOE. There is a large portion of timbered land in Louisiana and Arkansas, is there not?

Mr. LONG. I think so.

Mr. KINCHELOE. And the Government owns none of that.

Mr. McLAUGHLIN of Michigan. There is a forest reservation in Arkansas.

Mr. JONES. Has the Government ever realized any appreciable amount of money out of the sale of its timber lands to private owners to have it cut, or have they ever had any of it cut in any great amount?

Mr. LONG. They are cutting it all the while in the West in limited quantities.

Mr. JONES. On what basis does the Government usually dispose of that timber?

Mr. LONG. You mean, what price and what terms?

Mr. JONES. Yes; what price and on what terms?

Mr. LONG. I think you might get all of that much better from Mr. Greeley; I might not tell you the facts as they exist. I know they are selling timber all the while and getting a very good price for it.

Mr. McLAUGHLIN of Michigan. The Forest Service sells timber every year aggregating millions of dollars every year.

Mr. LONG. Yes, sir.

Mr. McLAUGHLIN of Michigan. The profit is never large. I suppose from the sale of timber they secure quite a sum of money; I do not remember the relation between that and their expenditures, but altogether they fell short of their total expenditures.

Mr. KINCHELOE. It is not self-sustaining.

Mr. McLAUGHLIN of Michigan. No; it is not self-sustaining.

Mr. GERNERD. Let me ask you this question, if you have not already covered it prior to my coming into the room: What are the lumber companies doing toward fire protection, if anything?

Mr. LONG. We touched on that before you came in, but I would be glad to repeat it.

Mr. GERNERD. No; you need not repeat it. I will read your testimony. I will go over it carefully. I do not want to waste your time.

Mr. LONG. Gentlemen, I think that covers all I have to say, except to once more emphasize that what I am thoroughly convinced of is the essential need for the reproduction of timber; that you have got to get every avenue in the country actively occupied on that job. It is not simply the Government's job; it is not simply the State's job, and it is not the individual's job. I do not think there is any particular reason why a manufacturer should grow a new forest for future generations, any more than I think that the man who grinds the wheat should know that there is to be wheat for some one else to grind later.

Mr. KINCHELOE. Has your organization taken any action on this bill?

Mr. LONG. Yes, sir.

Mr. KINCHELOE. What action has it taken?

Mr. LONG. It has approved it.

Mr. KINCHELOE. Entirely?

Mr. LONG. I will say right here that so far as this organization is concerned, it has 12 affiliated associations; each association has a director in the national association, and they have discussed this bill quite a great deal. We found some dissenters in the ranks of the lumber men. Some lumbermen do not like the scope of the bill. It may be that some of them will be here to talk to you on that subject. But so far as the general scope of the measure is concerned, on every vote that was taken, it was unanimous, except on one occasion.

Mr. CLARKE. What was the objection on the other side, if you remember?

Mr. LONG. I think the objection was that it was a little too vague in what the benefits were to be; that the Federal Government should set up what they would do with the State funds; and that the benefit should be more definitely specified. But the answer to that is that in North Carolina you have one problem, and in Louisiana you have another problem, and on the west coast it is entirely a different problem, and you can not enact in a bill like this provisions that will pertain to every situation. It has to be treated right on the ground, in accordance with the conditions that exist at the time. But the gentlemen who were fearful on that subject thought that the bill did not specify what the requirements were, and that it was a dangerous bill to play with. And that was the minority idea, I think. And we also have some old-fashioned State rights people in our ranks, and they are still with us, who object to the thought of taking away from the individual his private property and regulating him at that.

I say this, as my own belief, that whatever the enactments are that are finally decided upon that are essential to this propaganda, that in so far as it entails a burden on any business, on the lumber men, or anybody else, beyond the normal burden, it should not be at anybody's expense but those who benefit from it. If as a feasible proposition you have to enact legislation that makes it more expensive, if it is a regulation or enactment that is for the benefit of the public—the people at large—the public at large should help to defray that expense, and pay most of it.

Mr. McLAUGHLIN of Michigan. You are likely familiar with the terms on which the Government, the Forest Service, sells its timber in the forest reserves.

Mr. LONG. Yes, sir.

Mr. McLAUGHLIN of Michigan. And the conditions under which it requires that that timber shall be cut by the purchaser of it, taking care of the refuse, as you may call it, and cutting only certain kinds of timber, and so on.

Mr. LONG. Yes, sir.

Mr. McLAUGHLIN of Michigan. If regulations along that line, or anything like that, were imposed upon private owners, that they should cut their timber and put it on the market, in some such way, would that be feasible; could private owners operate under such conditions?

Mr. LONG. It would entail greater expense.

Mr. McLAUGHLIN of Michigan. It would entail more expense.

Mr. LONG. Yes, sir.

Mr. McLAUGHLIN of Michigan. Would the expense be so much that the private owners could not bear it, or would not bear it?

Mr. LONG. You have in mind the regulations requiring the piling of the brush, and so on?

Mr. McLAUGHLIN of Michigan. All the regulations; the regulations imposed upon the purchaser of public timber; are they reasonable, and could they be complied with?

Mr. LONG. In the main, they are reasonable. There are a few that a man can not swallow without batting his eyes a few times. For instance, if you are a man who owns a lot of timber, and you did not buy it of the Government, but got it in the course of business, and it is insisted that he spend more money and pile his brush in a certain way, he knows what that is; but suppose you say that every tree that is less than 12 inches in diameter he shall leave stand. He has paid his money for that tree, and if he has to leave it stand, that action relegates that tree to cold storage for some years; it relegates it to the assessor for some years, until such time as the Government shall say that it is fit to cut.

Mr. McLAUGHLIN of Michigan. Under this bill the Secretary of Agriculture may be authorized to impose upon private owners certain conditions if they are to receive any benefit by way of cooperation—

Mr. LONG (interposing). Yes.

Mr. McLAUGHLIN of Michigan. It is in the discretion of the Secretary of Agriculture, and he may impose those conditions.

Mr. LONG. He may do that.

Mr. McLAUGHLIN of Michigan. If this bill is passed he might be subjected to those conditions.

Mr. LONG. He would if the State backed up the regulations of the Secretary of Agriculture. They would have to approve it.

Mr. McLAUGHLIN of Michigan. Suppose the Federal and State Governments agreed as to the reasonableness of the regulations? What I want to find out is whether the regulations imposed so far by the Secretary of Agriculture have been approved by them and have not been found too burdensome?

Mr. LONG. Well, I think in the main all people who bought timber through the departments over which the Secretary of Agriculture has charge may pay for the timber that they take off the land. If the Government says, "You leave that tree there," it does not cost them anything. They have no tax burden; they do not need to assume a tax on what is left. Now, if you impose that sort of a burden—

Mr. McLAUGHLIN of Michigan (interposing). The regulation could be imposed if this bill were in effect.

Mr. LONG. It could be imposed if this regulation was approved of by the State.

Mr. JONES. And the State would have to approve it if they wanted to get the benefit of the appropriations?

Mr. LONG. Yes; they would have to approve it to get the benefit.

Mr. McLAUGHLIN of Michigan. I do not know much about the methods of cutting timber in your section of the country, but in some sections of the country everything is taken off the land.

Mr. LONG. Yes, sir.

Mr. McLAUGHLIN of Michigan. Everything that is good for saw purposes, or if it is not good for saw purposes, it is taken off and used for pulp if possible. They take what is left after what they can use for saw purposes and use it for pulp, and in that way they practically skin the land. That would hardly be possible, would it, if this bill were enacted and the Department of Agriculture should impose regulations upon the owners of the timber land; but they insist that they must be permitted to do that—not only to take all the timber that they use for their own particular business, but to dispose of the rest of it to the pulp man. They say they must do that in order to realize from their land.

Mr. LONG. The private owners take a long chance in going into that business with both the Federal Government and the State, that they may make regulations that is impossible for them to comply with. Now, we are saying that when we sit in with them and explain the situation to them they are going to be reasonable.

Now, out west we have two localities that the Government is selling timber from. One is in the pine-timber country, which is an open country; you can drive through with a horse and buggy almost anywhere. That is one distinct type. That is all through California and Arizona and Nevada, and they are compelling the purchasers to comply with regulations of piling the brush and selecting the timber, etc.

But you cross the mountains, and you run into another and a different stand of timber. You run into the Douglas fir. The Forest Service policy there is to let you go in there and do just what the lumbermen are doing; to cut down everything you can use and leave nothing, as the amount of debris that we get in logging that fir is probably four times as much as in any other forest in the world. That debris has to be disposed of before another forest will grow on the same land. You have got to

burn that in order to release the seed down in the soil, and there is no need to leave your seed tree standing there, because your fire running over that ground will kill the tree anyway. So they do not insist upon carrying out the policy in fir timber that they do in the pines.

Now, that is an illustration of what we think will be a settling of all these questions in every locality, under the conditions that obtain in the locality. Foresters will tell you that it is just as well to denude everything and to start with a new crop on that land. You may leave a tree for a new crop, but your fire, which has got to go through there, will kill your tree, because it has to go through the timber to burn up the debris, and it will kill off your tree anyway.

Mr. JONES. In view of that, would it not be well to have a general policy only, and leave it to the States?

Mr. LONG. That is what is contemplated in this bill.

Mr. JONES. But the Government, as I get it from my rather hurried reading of the bill, really holds a club over the States, so that they may dictate to them by withholding the appropriations.

Mr. LONG. I think it says they will cooperate.

Mr. JONES. I know, the first section provides that the Secretary shall cooperate with the various States and with the private and other agencies within the States in bringing into effect the essential requirements favorable to forest protection, etc., with a view to furnishing a continuous supply of timber for the use and necessities of the people of the United States. Now, in section 2, "The Secretary of Agriculture is authorized to withhold cooperation, in whole or in part, from States which do not comply in legislation or in administrative practice with such requirements as shall be established in accordance with section 1 of this act."

Mr. LONG. Isn't that just what you want him to do?

Mr. JONES. I am trying to get what you want him to do. I am seeking information on this is the reason I am asking you the question.

Mr. LONG. You can not be asking Congress to spend money the way the lumberman tells you to?

Mr. JONES. Of course not.

Mr. LONG. You have got to have somebody to put the brakes on.

Mr. JONES. That is what I am getting at. But you have just explained a set of circumstances which would indicate that the people who live in a State, together with those who make up the State—the entire citizenship—are naturally more familiar with the conditions, which differ in different localities, so that they could handle the proposition as a practical one; but the Government is simply making provision, in the present law, to take care of fires and insects, or anything they may do in the way of furnishing education, or information.

Mr. McLAUGHLIN of Michigan. But, Mr. Jones, you look at section 1 again, and you will find that the Secretary of Agriculture, through the Forest Service, is authorized and directed, in a cooperation with appropriate officials of the various States or other suitable agencies, to recommend for each forest region of the United States, certain things.

Mr. JONES. Yes.

Mr. McLAUGHLIN of Michigan. That is the basis for the witness's statement that these requirements should be determined by these different authorities acting together.

Mr. JONES. Yes.

Mr. McLAUGHLIN of Michigan. But they would be the Secretary of Agriculture's requirements in the end; that he would cooperate with these other authorities in determining what the regulations should be.

Mr. JONES. Very true. But the point I was making, while they are given the final say in the State as to what they will do, yet this club is held over them, "That you will comply with the wishes of the department, or you will not get the appropriation." Suppose the Secretary of Agriculture through his forest service, determines that it is necessary to leave certain trees, and he recommends that; the local State authorities find that the conditions are such that it would be wholly useless to hold those trees. Now, if they do not follow his recommendations, they do not get the appropriation.

Mr. McLAUGHLIN of Michigan. But he is not authorized to determine these things alone. He is authorized, through the Forest Service—he is "authorized and directed, in cooperation with the appropriate officials of the various States or other suitable agencies, to recommend for each forest region of the United States the essential requirements in protecting timbered and cut-over lands from fire, in reforesting denuded lands and, where and to the extent necessary, in cutting and removing of timber crops by such methods as will promote continuous production of timber on lands chiefly suitable therefor."

Mr. JONES. Yes; he recommends that in cooperation with them, but after he recommends that, he is authorized, if they do not follow that recommendation, to withhold the appropriation.

Mr. McLAUGHLIN of Michigan. You think he is authorized to withhold it?

Mr. JONES. I do not see any other conclusion. You take section 11 alone, and it may be he does not have that authority.

Mr. KINCHELOE. You take that language beginning with line 20 of section 2, "The Secretary of Agriculture is authorized to withhold cooperation, in whole or in part, from States which do not comply to this legislation or in administration tactics with such requirements as shall be established in accordance with section 1 of this act."

Mr. McLAUGHLIN of Michigan. That is in section 2. In section 1 it says that the Secretary, "through the Forest Service is authorized and directed, in cooperation with appropriate officials of the various States or other suitable agencies, to recommend for each forest region in the United States the essential requirements in protecting the timbered and cut-over lands, from fire," etc. There may be an opportunity for a difference of opinion as to the construction of that section 1, but I judged the witness's opinion was based on the theory that I advanced.

Mr. LONG. The witness's opinion is that the representatives of the Forest Service, while they come to us very often with technical ideas and from the viewpoint of the forester that comes to a man who has read books, the minute you can get them in the woods and show them something practical, they come to be practical themselves. If it were not so, the regulation which they insisted upon on the east side of the Cascade Mountains in Oregon would not have been different on the west side of the Cascade Mountains, within 50 miles of the same spot. In one instance they say to leave seed trees and to pile brush, and on the other side they say the physical conditions are such that it would not be necessary. What led to that?

By sitting in an office, a man would never get to it in the world. But in seeing that situation, in living with it, and analyzing it, he sees the condition, and the regulation is made accordingly. And if the lumber industry did not believe that the Forest Service in the Department of Agriculture would be practical, we would not be recommending this bill, certainly. But you have got to have a little faith, and work jointly with these people in these things, and that will make it workable. Not simply legislatures, and not simply Congress, but you have got to have the sympathy of the people themselves.

Out in our country, which is strictly a timber country, the timberman who is censured the most is the timberman who will neither sell nor cut his timber. The forest man who will say that is a fine tree, that is fine stuff, and you will not cut the tree down, is the man who is censured. Conservation is a word out there that is often sneered at. We have got to educate the people. The man that will not cut and sell his timber is the man that the taxing officials go after with a sharp stick and force to sell it. Now, you have got to revamp that idea. Here is a big game, and we have all got to play together. It sounds Utopian, but it is worth while the minute you establish the fact that the lumbermen and the Forest Service can work together harmoniously, and I think we can.

Mr. KINCHELOE. Let me ask you about this bill:

Section 1 starts: "That the Secretary of Agriculture, through the Forest Service, is hereby authorized and directed, in cooperation with appropriate officials of the various States or other suitable agencies, to recommend for each forest region of the United States the essential requirements in protecting timbered and cut-over lands from fire, in reforesting denuded lands, and, where and to the extent necessary, in the cutting and removing of timber crops by such methods as will promote continuous production of timber on lands chiefly suitable therefor."

Now, beginning on line 20, of section 2, it says: "And the Secretary of Agriculture is authorized to withhold cooperation, in whole or in part, from States which do not comply in legislation or in administrative practice with such requirements as shall be established in accordance with section 1 of this act."

Now, you drew the illustration a while ago as to how they cut timber in your pine forest, and protect it, and in the fir forest they do not protect it, and you gave a good reason for it. Suppose a State official who is cooperating with the Secretary of Agriculture under this law should, in the fir proposition, differ with the Forest Service and say that they think some of those trees should be preserved, and suppose in the pine reserves they should say they should cut all of it; and suppose the Secretary of Agriculture should say he did not think so; suppose they can not agree, do you not think in this case the Secretary of Agriculture, who holds the purse string, will exercise the right to withhold the appropriation from those people, because he differs with them?

Mr. LONG. I think so.

Mr. KINCHELOE. In other words, he is the court of last resort, because he holds the purse strings.

Mr. LONG. He can.

Mr. JONES. And holding that purse string, he can practically dictate the policy.

Mr. KINCHELOE. He can absolutely dictate it.

Mr. LONG. Who does he represent; himself or others?

Mr. JONES. The people of the United States, of course.

Mr. LONG. Yes; and that is what that provision is for.

Mr. JONES. But you meet yourself coming back. You make an argument for local control.

Mr. LONG. Local application.

Mr. JONES. But you are turning over to the National Government the final say as to the policy.

Mr. LONG. Don't you think we would be rather a misguided bunch to come down here and ask you to make an appropriation where you did not have any voice in the distribution of the funds?

Mr. JONES. Most certainly. But what I am trying to get at is the advantage that this bill holds over the present law. A good deal of your argument seems to hold that it might do pretty well with the present policy, rather than under the provisions of this bill.

Mr. LONG. The present law is confined to just the application that pertains to the Weeks law. There is an appropriation to protect the timber along the line of the Weeks law. This widens that out and makes it general. The only present law you have on that subject is the so-called Weeks law. It protects timber at the head of navigable streams; it is local in its application and not general whatever. Now, we are doing that with the Weeks law now. We get Weeks law money now in our State on this same plan. For instance, if the Government is protecting timber along one of the upper branches of one of our rivers, and we have some on the same branch, we could get money to protect that timber. We protect that at that point, but that does not cover all the timber in a State or in a Territory. So the Weeks law regulates the extent that that money can be applied to the timber.

Mr. KINCHELOE. But you think that was a pretty pertinent point that Mr. McLaughlin raised this morning, the extension of this Weeks law, in view of the opinion of a former chairman of the Judiciary Committee saying that it could only apply under certain conditions.

Mr. LONG. The question is whether you could not change the Weeks law?

Mr. KINCHELOE. It is a question of whether it would be constitutional. Let me ask you another question, carrying out the suggestion of Mr. McLaughlin when he asked you if the present regulations were imposed on private owners, if it would militate against the private owners to such an extent that the cost would be prohibitive. You say there would be an extra cost. Now, I can see that it would not hurt the buyer; he knows what cost he would have to pay, but would it not hurt the grower?

Mr. LONG. He would pass it on.

Mr. KINCHELOE. He would pass it on, and therefore you pay me less for the timber?

Mr. LONG. Pass it on to the customer; it would probably land in either one of those two places.

Mr. KINCHELOE. It is bound to come out of one or the other?

Mr. LONG. Yes; it is bound to come out of one or the other. There is no question about that.

Mr. McLAUGHLIN of Michigan. I would like to ask you about section 4 that you have been speaking of. You were speaking when I came into the room, and possibly you have covered it. That provides for an appropriation of only \$1,000,000, which would not go very far, if the work permitted and provided for in that section were carried on. We know that appropriations are very small sometimes in the first instance, and after a start is made a great deal of money is called for later. That is a pretty broad section. "To enable the Secretary of Agriculture to conduct experiments and investigations in reforestation and methods of cutting and utilizing timber." That might be experiments for using timber for all conceivable purposes.

Mr. LONG. Yes, sir.

Mr. McLAUGHLIN of Michigan. "To establish forest experiment stations." The question might arise, What kind of forest experiment stations?

"And to conduct experiments, investigations, and tests in the chemical, physical, and mechanical properties and utilization of native and foreign woods and other forest products, including timber tests, wood preservation, tests of wood and other fibrous materials for pulp and paper making methods and processes, and such other tests and investigations as in the judgment of the Secretary of Agriculture shall be desirable to promote the most effective use of forest products in the United States."

Mr. SNELL. If you will allow me to make a suggestion, Mr. McLaughlin, we have a couple of witnesses who will come on here either late to-day or to-morrow to pay special attention to those provisions and be more able to answer the question than Mr. Long is at the present time. However, I have no objection to the question at this time.

Mr. McLAUGHLIN of Michigan. Then I will withdraw that question in its broad sense at the present time. I will ask the witness if he knows anything of the work being done at the laboratory at Madison, Wis.

Mr. LONG. I know of it by hearsay. I have never visited the plant. I do know that during the war there activities were very widespread, and very beneficial to the Government, especially in connection with the use of lumber, and the treatment of lumber for airplane work. Their method of drying lumber in a dry kiln, was successful, and they produced kiln-dried lumber in a way which was not possible prior to that time. I know they are making experiments with reference to using wood and wood products that formerly were wasted. I know of two or three companies that have taken up the thread of their investigation and are engaged in an attempt to utilize the waste by reason of discoveries that have been made at the laboratory at Madison.

I know particularly of one company that is organized to make wall board out of saw dust and bark, solely upon the discoveries that were made there. As to the chemical tests, I am not so familiar with them, but they have a great many tests down there that surely will be realized some day.

Mr. McLAUGHLIN of Michigan. I remember very well when that laboratory was established. Mr. Pinchot was the forester then, and he recommended such a laboratory, and it was the idea that it was to serve the Great Lakes district, but my information is to the effect that the laboratory is receiving wood, and samples of wood and timber from all parts of the country.

Mr. LONG. Yes; I think so.

Mr. McLAUGHLIN of Michigan. And that they are treating and testing them and so on. Now, if the work of that laboratory is being well done—and I thought perhaps you were familiar with the work that was being done—and if it is being well done, it would not be necessary to have a large number of them, such as might be established under this bill. I know the appropriation made by Congress has been quite large each year since about 10 years ago, when that laboratory was established.

Mr. LONG. I think you could bring out that idea much better by a further talk with Mr. Greeley than I would be able to give you. But I do know that that organization there now can not begin to do the work which is being passed onto it by the lumbermen of the country; especially by those who are users of lumber, the vehicle people, and the people who are up against it in finding substitutes or new woods for those that they have used in the past.

Mr. McLAUGHLIN of Michigan. Would it be better if new laboratories were established?

Mr. LONG. I think all you want to do is to meet the demand that the industry calls for. I do not know whether there is any virtue in having it scattered all over the country.

Mr. McLAUGHLIN of Michigan. You can see that the number would be almost unlimited if the Secretary of Agriculture were to establish these stations to conduct experiments in the method of using timber and lumber used for every conceivable purpose.

Mr. LONG. The experiment of creosoting ties for the use of railroads has probably lengthened the life of the tie three times what it was before. I think a great deal of that experimentation was done by the railroads themselves, and yet the laboratory at Wisconsin has been very beneficial to them.

Mr. McLAUGHLIN of Michigan. That is just one process; yes.

Mr. LONG. I think here is a proposition that is rarely realized: The raw product that is in the tree itself, when it gets to the user of the article, is scarcely more than 60 per cent of the raw material. There is a vast amount of waste that we have not found any way of using; a vast amount of waste. And if methods of using that waste can be found that is true conservation. Every time you can take a waste product and make a useful commodity out of it, and that commodity supplants the use of a board, you are working right directly in the line of conservation of timber. And I think the various people that work along this line have visions that they can accomplish a great deal more if they are given more liberal appropriations in that line of work. Naturally that is their viewpoint.

Mr. McLAUGHLIN of Michigan. I have been receiving a number of letters urging the Federal Government to make an appropriation to establish a laboratory in Michigan. I represent one of the districts in Michigan, and, of course, am interested in anything that is to be done up there, and the people have written to me about it. And I have replied to all those letters that there is one laboratory now at Madison, and it was

established particularly to take care of the lake region, and there is no need of one in Michigan. I do not know whether the people who wrote me got their idea from this bill that a great lot of them were to be established and every place could have one if it asked for it; that a great number of them would be established. Is it your idea that a great number of them will be established?

Mr. LONG. No, sir; that is not my idea at all. It is the quality of your laboratory, rather than their numbers.

Mr. McLAUGHLIN of Michigan. You authorize it in your bill. I never believe in authorizing anything that you do not want to have done; if you do not want it done, do not give any authority to a Government official to do it.

Mr. LONG. I think that is a just criticism.

Mr. KELLOGG. There is no intent whatever to have anything other than one forest products laboratory like that one at Madison. The things you have reference to are not forest product laboratories in any way.

Mr. McLAUGHLIN of Michigan. What are they?

Mr. KELLOGG. That will be fully covered by Mr. Dana, State forester of the State of Maine, later on. These are not forest products laboratories, but are forest experiment stations. There is one in the southern Appalachian Mountains now, and one in the White Mountains, and one in Arizona at the present time, and one on the Pacific coast for the study of the growth and habits of trees. It is a forest experiment station absolutely; it is not a laboratory, such as the one at Madison. It requires a small number of people, but it can supply information that we have absolutely got to have on the growth of trees, and the habits of trees, and the effect of the climatic conditions on the timber, and the condition of the soil, and so on.

Mr. McLAUGHLIN of Michigan. That is not covered by this section.

Mr. KELLOGG. It seems to me it is. The forest products laboratory is not a forest experiment station. "To enable the Secretary of Agriculture to conduct experiments and investigations in reforestation and methods of cutting and utilizing timber, to establish forest experiment stations," these three lines of section 4 are all that have to do with forest experiment stations. The balance of the section deals entirely with the kind of work done at Madison, and there is no intention to duplicate that at any other place.

The CHAIRMAN. In your answer awhile ago, you estimated the supply of timber at a certain number of billion feet, and you estimated that the supply, at the present rate of use, would last about 160 years, at which time the supply will be exhausted.

Mr. LONG. There are so many elements in that question—how fast the country grows, how many more people we will have, and the inroads that will be made, and the substitutes that we will have, and so on.

Mr. CLARKE. Well, considering present conditions as they now exist to-day, what would you say?

Mr. LONG. One hundred years.

Mr. CLARKE. One hundred years?

Mr. LONG. Yes.

Mr. CLARKE. We will have exhausted our natural supply in 100 years, is that it?

Mr. LONG. Yes.

The CHAIRMAN. I thought you said that 2,500,000,000 feet was our present supply of timber.

Mr. LONG. Yes.

The CHAIRMAN. And the consumption was about 32,000,000,000 feet per year?

Mr. LONG. The consumption of lumber would be about 32,000,000,000 to 35,000,000,000 a year.

The CHAIRMAN. And the estimated shortage from fifteen to twenty billion?

Mr. LONG. Yes.

The CHAIRMAN. And your estimate is about a hundred years?

Mr. LONG. Yes. We have taken another thing into consideration, and that is the loss by fire that occurs now, which is variously estimated from fifteen to twenty billion feet a year.

The CHAIRMAN. Your estimate, then, is about 100 years?

Mr. LONG. Yes, but that is a foolish kind of an answer, because no man knows.

The CHAIRMAN. What is your idea of reforestation? You suggested that the Government should take over all the cheap land and carry the burden. Why shouldn't the private owners be encouraged to reforest their lands, and why do they not do it?

Mr. LONG. The private owner does not do anything unless he can make it pay.

Mr. CLARKE. That is absolutely correct.

Mr. LONG. We do not claim to be any better than our neighbors, but we do want to help in this work, and it is the best possible work, and a lot of them can bring to it a great deal of knowledge and a lot of enthusiasm.

The CHAIRMAN. Now can you give us an estimate as to the cost of reforestation; what it would cost to grow an acre of timber, starting out with \$5 an acre, as I believe it was estimated?

Mr. LONG. Do you mean for the Government to do it or for the individual to do it?

The CHAIRMAN. Well, anybody.

Mr. LONG. Well now, if the Government did it, and paid \$5 an acre for the land—

The CHAIRMAN (interposing). Say from \$5 an acre to \$7 an acre.

Mr. LONG (continuing). And if the individual did it at \$5 an acre, both of them figured at 5 per cent interest compounded, the Government could beat the individual to this extent, that the individual would have to see the tax collector every year; that would have to be compounded.

And after the individual's forest was 10 to 15 or 20 years old, instead of being assessed as something that did not have any value, they would say, "Why, that will be a forest pretty soon," and they would set up a valuation.

The CHAIRMAN. Let us eliminate the taxes now entirely.

Mr. LONG. I never have made the figures on that, but you know, Mr. Chairman, that you can not eliminate the taxes. That is something that can not be done.

The CHAIRMAN. Just take the figures on the cost of the land alone and eliminate from it the question of the taxes.

Mr. LONG. It is pretty hard to tear me loose from that position, because I know you can not do it with the individual. Now, I think that possibly Mr. Allen has made some figures on that. I never have figured that out. But I think that Mr. Allen did make some figures on that. Didn't you make some figures on that which show the probable cost of growing timber in the fir region?

Mr. ALLEN. Why, I couldn't answer that question much easier than to answer what it costs to keep a wife. In some places it reproduces for nothing, and in some places you would have to plant.

Mr. GERNERD. He means reforestation by planting.

The CHAIRMAN. Now, what do you estimate as the cost if one purchases the land at \$5 an acre, and the money is worth 5 per cent? That is a simple proposition.

Mr. ALLEN. That \$5 includes the expenses of—

The CHAIRMAN (interposing). Let us eliminate the taxes. First, the cost of the land, the value of the investment.

Mr. ALLEN. Well, I would go back to the same answer that it depended whether I had to restock it or whether the trees came in for nothing, whether I had to pay anything except for taxes and fire protection. There is a range from nothing to probably about \$50 an acre that you would have to pay to restock it.

The CHAIRMAN. Eliminate all of it. The \$5 investment, what does that amount to in 100 years?

Mr. LONG. Well, you can figure it out with a pencil. You could take the amount invested and figure out the interest compounded.

Mr. ALLEN. Well, that would be a simple calculation.

The CHAIRMAN. How many years does it take to grow a tree—for wood-pulp purposes?

Mr. LONG. You would probably get a pretty good tree in 20 years. With the hardwood trees, it would probably take you 100 years. Even then you would not get the best tree.

The CHAIRMAN. At any rate, it would cost about \$500 an acre at the end of a hundred years?

Mr. LONG. Yes, sir.

The CHAIRMAN. What would that acre be worth?

Mr. LONG. Well, it would be worth so much that you could not use the lumber probably.

The CHAIRMAN. What is it worth at the present time?

Mr. LONG. At the present time?

The CHAIRMAN. Yes.

Mr. LONG. Timber?

The CHAIRMAN. Yes; fairly good timber; such as you would expect to grow in 100 years?

Mr. GERNERD. Your question is quite an important one, Mr. Chairman. I am anxious to find that out myself.

Mr. CLARKE. You can not get a basis for the thing. Some timber is different from other timber.

Mr. GERNERD. Figure what it would cost if you could buy land for \$5 an acre. In 100 years you would have fairly good timber on the land.

Mr. LONG. Do you want to know what it is worth now?

Mr. GERNERD. Yes; an acre; what is worth now, on the average?

Mr. LONG. It runs to-day from \$1.50 I think, to \$5 per thousand, depending on where the timber is, etc.

Mr. CLARKE. Depending upon location and transportation, is that what you mean?

Mr. LONG. Yes.

Mr. GERNERD. In your locality.

Mr. LONG. You take out in our country, it is worth \$1.50 to \$2 a thousand.

The CHAIRMAN (addressing Mr. Greeley). What is the average price?

Mr. GREELEY. The average price received last year was \$2.60 a thousand. That is mostly, of course, western timber.

The CHAIRMAN. How many thousand feet to an acre of timber?

Mr. LONG. Down in Florida it is about 1,500 feet to the acre.

Mr. GERNERD. Fifteen hundred?

Mr. LONG. Yes; timber being located down there has only 1,500 feet to the acre. In Mississippi I suppose it runs from five to twelve thousand feet. I don't know so much about Louisiana; ten to fifteen thousand.

Mr. GERNERD. How about down in your country?

Mr. LONG. I am getting to that. Inland Empire, fifteen to twenty thousand or 25,000.

Mr. CLARKE. Give the fir.

Mr. LONG. Out in the fir district, west of the Cascade Mountains, it runs from 20,000 to 60,000 feet to the acre, with a probable average of thirty to thirty-five thousand feet to any forest that has not been badly split up by fires.

Mr. GERNERD. Of course, that is paying more freight.

The CHAIRMAN. That is less than \$100 an acre.

Mr. LONG. Of course that tree out there has to be brought over here before it can be utilized.

The CHAIRMAN. It would not be a paying proposition to grow the timber. If the timber is to be grown at all it must be grown by the Government. Isn't that it?

Mr. LONG. Yes, sir; I think so.

The CHAIRMAN. Your contention is that the Government has got to grow it?

Mr. LONG. Yes.

The CHAIRMAN. The individual can not grow it?

Mr. LONG. I think so, unless he has help; if you put him on the same plane that the Government is he will grow a tree.

The CHAIRMAN. Government aid is necessary?

Mr. LONG. Surely it is necessary.

The CHAIRMAN. Any other questions?

Mr. SNELL. Mr. Chairman, Mr. Greeley is back here now, and he had some things he wanted to say, and there were some questions he wished to answer.

Mr. GERNERD. Just a minute. While we believe in national conservation, and the acquiring of waste lands, might it not be well if Federal aid were given to State aid based upon the number of acres that the State acquired for that purpose, so that you would have two elements working along the lines of State conservation and national conservation?

Mr. LONG. I think if you would analyze a little what the States are now doing in that direction you will find those who are most pressed by necessity are acting with the most activity. For instance, Massachusetts has been doing more than Wisconsin because she was denuded of timber long years before Wisconsin was. New York State and Pennsylvania are acting with a good deal more celerity than Ohio or Indiana, because they feel the necessity for it. You have got the people over here. The people are what use lumber. The State of New York, as I understand it, voted a bond appropriation last year of \$5,000,000 to acquire forest area to grow a crop of timber on. I don't know to what extent Pennsylvania has spent money, but in New York State, as I said, there was this bond appropriation voted. Now you want to grow timber always where it is needed most. It does not do you so much good to grow a forest out on the Pacific coast as it does to grow one right here at home. But you ought to be growing them in both places. It is a good deal like the propaganda of shipbuilding during the war; there ought not to have been a wooden ship built.

Mr. CLARKE. Amen.

Mr. LONG. But on the theory that you might need all kinds of ships, why you built all kinds anywhere you could. Now there is no place that forestry ought not to be practiced, no place but what they ought to be growing timber, but the most essential place of all is right here where you have been whaling away cutting it for the last 200 years.

Mr. GERNERD. That is right.

Mr. LONG. And that is where the most activity is now in forestry work; your own States.

The CHAIRMAN. In your opinion, are all States likely to cooperate?

Mr. LONG. I think so.

The CHAIRMAN. Has that matter been discussed?

Mr. LONG. You will find that the State that is denuded of timber will cooperate most quickly. Out in our country you will find a great many people who are not directly connected with forestry or lumbering. They will say: "Well, the thing that we want to do is to cut this timber and make business good. We are not interested so much in growing a new crop. We are interested in turning this crop over that we have and get money out of it."

The CHAIRMAN. Has the matter been discussed in Michigan and Wisconsin, do you know?

Mr. LONG. I think it has. And I will speak now for my own State, which is the State of Washington. I will just speak for that State. We got a bill through the legislature last year committing the State to the policy of acquiring land. The State of Washington now has between 600,000 and 700,000 acres of the finest timberland we have own out there. They own it in fee simple. They are selling it as the operator wants it, at the current market price. They already in that direction are carrying on excellent forest work, but they are starting out now with a scheme of acquiring additional land to grow a new forest.

But when I tell you about the appropriation you will smile at the effort. The appropriation made for that colossal effort last year was \$5,000, and that \$5,000 has been very religiously spent within the last three months by the State forester coming to our Washington Forest Fire Association for our expert men who knew all about the areas that have been denuded, coming to us for cooperation to go with him and select a little sample area, and buy it for \$5,000 to start the movement. A very insignificant start, gentlemen, but it is a start. And I think we can work it up to a point where it will become a reality in time.

The CHAIRMAN. Has the matter been discussed with the Central States; that is, Minnesota, Wisconsin, and Michigan?

Mr. LONG. I understand that in Michigan they have 300,000 acres now in their State forest. I don't know how much they have now in Wisconsin, and I don't know how much they have now in Minnesota, but they have got, I think, according to Mr. Greeley's statement here this morning, in each of those States, a State forest program on now. There are vast areas in each of those States that are not being utilized.

We have in the State of Washington to-day over 1,000,000 acres of logged-off land, fully 75 per cent of which is not fitted for agriculture.

The CHAIRMAN. Well, you have it in the Western States, but the freights are so high it is not within our reach.

Mr. LONG. You want to grow it.

The CHAIRMAN. We are more interested in something that is grown a little nearer us, where it can be bought and delivered at a more reasonable price.

Mr. LONG. Yes; that is the place where you could put your money. I think that question ought to be answered this afternoon or to-morrow.

The CHAIRMAN. We have some of those representatives here.

Mr. SNELL. We have representatives of the State forestry organizations who will explain that.

The CHAIRMAN. Yes.

Mr. SNELL. Mr. Chairman, Mr. Greeley is here now, and several members of the committee desired to ask him a few questions, and he will go back on the stand and answer the questions that you now care to ask him. I think Mr. McLaughlin asked Mr. Long some questions that he was not able to answer, but Mr. Greeley is here, and he is able to answer all those questions.

(Mr. Long was excused as a witness.)

FURTHER STATEMENT OF HON. WILLIAM B. GREELEY, CHIEF OF FOREST SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE.

Mr. JONES. I was asking some questions a while ago concerning sale of timber by the Government. On what terms and at what prices does the Government sell its timber?

Mr. GREELEY. The Government designates mature timber in the national forests for sale, subject to whatever requirements are necessary to secure reforestation, appraises the value of the stumpage, and then puts it up for competitive bids. The standing timber alone is sold, not the land, and only the trees designated for cutting by the forest officers. The cutting methods are closely supervised by forest officers

to secure the disposal of slashings, the observance of all requirements as to saving small timber or seed trees, etc. The timber is paid for on log measure after it is cut.

Mr. JONES. Has the Government been able to secure real competitive bidding in the sale of its timber?

Mr. GREELEY. In a good many cases we have been able to secure real competitive bidding, in some cases not. That depends entirely upon the local market. In many sales we have from two to four bids. In other sales only one bidder. But in every case an upset price is put upon the timber by our own officers, which represents its market value in our judgment, and no bid of less than that price is accepted.

If there are no further questions, there is one more comment I would like to make upon this question of timber supply.

The CHAIRMAN. Are there any others who have any questions to ask? Have you, Mr. Kincheloe?

Mr. KINCHELOE. No.

The CHAIRMAN. Mr. Clarke?

Mr. CLARKE. No.

The CHAIRMAN. Mr. Gerner?

Mr. GERNERD. No.

The CHAIRMAN. Very well.

Mr. GREELEY. There is one comment I would like to make upon this question of timber supply. The present estimated stand of timber in the entire country is some twenty-two hundred billion feet. Out of that we are using each year, including all products of saw log size, pulp wood, veneer logs, railroad ties, etc., the equivalent of approximately 56,000,000,000 feet. That is offset in part by growth. From our estimates, which we recognize are crude, the yearly growth of timber in terms of saw measure is something less than 10,000,000,000 feet a year. So we are taking out of the capital, so to speak, around 46,000,000,000 feet of timber every year. If you want to make your own estimate as to how long the supply is going to last, you can divide 45 into 2,200 and get some approximation, assuming that present conditions are continued without change.

Mr. KINCHELOE. Does that 56,000,000,000 feet a year include loss by fire, too?

Mr. GREELEY. Yes.

The CHAIRMAN. Your figures do not correspond with the figures given before. That estimate was two thousand five hundred billion feet the present supply, and 32,000,000,000 feet consumed each year.

Mr. GREELEY. The 32,000,000,000 feet, I think, was based only on the consumption of lumber.

The CHAIRMAN. And the estimated growth was given as 20,000,000,000 feet a year.

Mr. GREELEY. There are a good many products taken out of our forests besides lumber.

The CHAIRMAN. But the estimated growth was given as 20,000,000,000 feet a year.

Mr. GREELEY. Yes.

The CHAIRMAN. And you are giving the estimated yearly growth of timber as 10,000,000,000 feet?

Mr. GREELEY. I am giving you the best information the Forest Service has been able to obtain. That indicates that with the present rate of consumption and no change in existing conditions otherwise, the remaining supply of timber may be exhausted between 45 and 50 years. Of course we know that conditions as to consumption and regrowth are changing all the time, and that any estimate of how long the timber supply is going to last is apt to prove wide of the mark. But that is the general situation.

The CHAIRMAN. Well, is the consumption of lumber likely to be increased or decreased, do you know?

Mr. GREELEY. As near as we can tell, the total consumption of timber for all purposes, including paper and other products besides lumber, tends to remain very much the same. The per capita consumption of lumber is dropping off, but the total drain of the country upon its forests tends to remain about the same.

The CHAIRMAN. You say the consumption now is 56 billion feet a year?

Mr. GREELEY. Fifty-six billion feet a year.

The CHAIRMAN. Yes?

Mr. GREELEY. That represents the average for the past five years. The figure was used in our report to the United States Senate. It includes everything taken out of the forests that is of saw-log dimensions.

Mr. KINCHELOE. Is your reforestation increasing any on the Government domain?

Mr. GREELEY. On Government land?

Mr. KINCHELOE. Yes.

Mr. GREELEY. Yes, sir; it is increasing not only on Government lands, but on a good many other lands. It is increasing slowly all the time.

Mr. KINCHELOE. That would prolong it?

Mr. GREELEY. That would tend to prolong it; yes, sir.

Mr. Tinchler, I think, raised the question this morning as to the intent of the first section of the bill in reference to cooperation with appropriate officials of the various States or other suitable agencies in determining what the requirements in each region should be. I can make the idea clearer by saying that this section contemplates two steps.

The first is the step of consultation, as the result of which the Secretary of Agriculture would determine what the requirements should be in each instance. The second step would be one of cooperation with the State, and with the State alone.

In the initial step of consultation, to determine what the requirements shall be, the intent of the bill is that the Forest Service should not only consult the State foresters and other State agencies, but organizations like the fire protection organizations, the Western Forestry and Conservation organization, or the Southern Forestry Congress, organizations which have given a good deal of thought and study to these questions and which have valuable and practical experience to offer.

I would also call the attention of the committee to the fact that in some 9 or 10 States there are no State organizations whatsoever, no State forest departments. In determining what the requirements should be in those States you would have to seek the advice and guidance of some one other than State agencies. In other words, the intent of the language is that in the process of consultation to determine what the requirement in each region should be, the Secretary of Agriculture may go just as far and wide as he chooses in obtaining practical help and advice from individuals or organizations, as well as from the State officials.

Mr. McLAUGHLIN of Michigan. If you will permit me, this language does not mean that at all. You would say that after consulting with certain authorities he makes his recommendation, and provides his rules. Now that would mean that the authority was entirely in him, and he might talk with these other people as much or as little as he pleases, and reach his own independent judgment. In my opinion this language does not mean that at all. He "is hereby authorized and directed, in cooperation with * * * to recommend." That would mean authority on the part of those that he conferred with. That the recommendation would be partly theirs as well as his.

Mr. GREELEY. All that I can say about that, Mr. McLaughlin, is that if the bill is susceptible of that interpretation, it should be changed. The Secretary of Agriculture should be responsible himself for the requirements and rules which he finally sets up. That responsibility and authority should rest with him.

Mr. McLAUGHLIN of Michigan. I may have misunderstood.

Mr. GREELEY. This cooperation in determining what those rules and requirements should be should be a matter of consultation and advice: the final decision resting with the Secretary of Agriculture.

Mr. KINCHELOE. And you would have it that when he came to the final conclusion he would not consult State officials at all?

Mr. GREELEY. He should consult the State officials.

Mr. KINCHELOE. And then do as he pleases?

Mr. GREELEY. And then make up his own mind.

Mr. KINCHELOE. And then do as he pleases?

Mr. GREELEY. Yes.

Mr. KINCHELOE. Let the States do as he says.

Mr. McLAUGHLIN of Michigan. Don't you think there is a difference in consulting a man, and acting in cooperation with him and determining what should be done?

Mr. GREELEY. As I said, sir, if the bill does not mean what I indicated, it should, in my judgment, be amended to clarify that point. My position all the way through has been that the Department of Agriculture, after very careful study and cooperation, or consultation, whatever you wish to call it, should determine what the requirements should be. That should be its responsibility, and should not be shared with anybody else. That is a matter of authority.

Mr. McLAUGHLIN of Michigan. Now, the gentleman who was a witness last is abundantly able to speak for himself. But I gathered from him—and if I am wrong, he of course will correct me—that these things should be recommended and put into force only after consultation; not only after consultation with these other officials, but they should have something to say about it. And these regulations should be a part of their work, too, and their determination. The Secretary of Agriculture would not have authority to go in and impose any regulations he pleased, regardless of their wishes.

Mr. GREELEY. My view of it is that the process of consultation—cooperation in advising what the requirements should be—is a very desirable feature; that after all

the facts are before him, the Secretary of Agriculture should reach his decision. I do not see how he can retain a clear-cut responsibility in the matter in any other way.

Mr. SNELL. You would expect that he would be guided to a certain extent by the people who would consult with him?

Mr. GREELEY. Yes; I would expect that he would be guided to a considerable extent by the people who would consult with him. He would be guided by the practical advice and experience of people who are interested in these practical problems, but after he has had their advice he would come to his own conclusion.

The CHAIRMAN. In your opinion, how much money would be required to provide for an adequate supply of lumber? Will this money suggested here do that? Will it be sufficient?

Mr. GREELEY. No, sir; it would not. It represents a fair start.

The CHAIRMAN. Well, now, have you an estimate that you could give us as to the ultimate cost?

Mr. GREELEY. Of growing timber?

The CHAIRMAN. To supply the necessary timber, or to provide for an adequate supply.

Mr. GREELEY. I would be a little afraid to indicate what the figures might reach. We have estimated that to give all of the forest lands in the United States efficient protection from fire, outside of the national forests, would take about \$9,000,000 a year.

The CHAIRMAN. Above the receipts?

Mr. GREELEY. No, sir; regardless of receipts. The actual protection of all areas from fire, timbered and cut over alike.

Mr. SNELL. Outside of the national forests?

Mr. GREELEY. Outside of the national forests.

Mr. McLAUGHLIN of Michigan. Do you remember what size of appropriation was asked for for fire protection in the national forests? Am I wrong in saying that the amount of service you asked this committee to recommend and Congress to appropriate has run \$100,000,000 a year?

Mr. GREELEY. For what purpose?

Mr. McLAUGHLIN of Michigan. For fire protection.

Mr. GREELEY. Oh, no, sir; I never dreamed of anything like that, Mr. McLaughlin.

Mr. McLAUGHLIN of Michigan. Well, how high have they ever run?

Mr. GREELEY. The maximum expended in any year for the protection of the national forests has never exceeded \$3,000,000. That is to protect 156,000,000 acres.

Mr. GERNERD. How many acres?

Mr. GREELEY. One hundred and fifty-six million acres.

Mr. GERNERD. Oh, that is very cheap insurance.

Mr. CLAGUE. Can you tell us, Mr. Greeley, about how many acres of forest land we have in Minnesota, Wisconsin, and Michigan, in each of those States? Have you got the figures approximately?

Mr. GREELEY. I have a table here, sir.

Mr. CLAGUE. I mean of Government land.

Mr. GREELEY. Of Government land?

Mr. CLAGUE. Yes; forest lands.

Mr. GREELEY. I have not a table here that will give that. I can readily insert it in the record if you wish it.

The net area of the national forests in Michigan is 89,466 acres; in Minnesota, 1,047,620 acres. There are no national forests in Wisconsin.

The CHAIRMAN. I understood you to say that \$9,000,000 would be necessary to protect the forests. What else is there? What is the ultimate cost?

Mr. GREELEY. I do not see, Mr. Haugen, how you can name a figure and say that such and such is the ultimate cost.

The CHAIRMAN. Well, just make an estimate.

Mr. GREELEY. Because the cost of growing timber is a matter, in the first place, of fire protection carried over a good many years, plus the cost of planting a certain percentage of the land carried until the timber reaches maturity. We have made a good many estimates.

The CHAIRMAN. I am speaking of the supply now. Whether it is to be by protection, or by reforestation, or whatever method you might adopt. How much money is it going to cost to supply the ultimate needs of timber?

Mr. GREELEY. As far as I can answer that categorically it would be in some such way as this. Considering all conditions, east and west, as far as our investigations have gone, merchantable timber on the average can be produced for ten to fifteen dollars a thousand feet. That is the cost of the grown stumpage.

Now you multiply ten of fifteen dollars by our present yearly consumption of 56,000,000,000 board feet and that may answer your question. It is a pretty theoretical attempt to give a financial measure of the problem.

The CHAIRMAN. Well, I understood you to say that the shortage was about 46,000,000,000 feet.

Mr. GREELEY. Yes.

The CHAIRMAN. Now, what will it cost to produce that 46,000,000,000 feet?

Mr. GREELEY. Ten to fifteen dollars a thousand, looking ahead to the supply we will have to have after the present virgin timber is cut. But you understand, sir, that is not to be a public expense. The public expense would be a very small portion of it. It would be primarily an expense upon the owner of the land who gets his value out of the timber after it is grown.

Mr. KINCHELOE. Well, if I understand you, Mr. Greeley, your idea of how this bill should be written with regard to section 1 here is that all the Secretary of Agriculture should be required to do under this bill is to consult the State officials and other agencies, if you keep that in there, for the purpose of recommending "for each forest region of the United States the essential requirements in protecting timbered and cut-over lands from fire," etc., and that he is not to cooperate with the State officials at all; he is just simply going to consult with them to see whether they agree with him or not, and if they do not agree with him, to go on and carry out the provisions of this bill anyhow, the wishes of the State officials to the contrary notwithstanding.

Mr. GREELEY. No, sir.

Mr. KINCHELOE. Well, then, I certainly misunderstood you. I want to know about that.

Mr. GREELEY. The whole essence of this bill is that action in the State of Kentucky rests with the State of Kentucky.

Mr. KINCHELOE. Well, they would not do it if you say that the Secretary of Agriculture does not have to cooperate with the State officials.

Mr. GREELEY. The Secretary of Agriculture would be powerless under this bill to do anything in the State of Kentucky except through the action of your legislature and your executive agencies.

Mr. KINCHELOE. Well, then, what did you mean a while ago when you said your idea of the way the bill should be written is that the Secretary of Agriculture is to have the privilege of consulting with these State officials and these other agencies, and at last the power shall rest in him?

Mr. GREELEY. The authority would rest with him to determine what his requirements are going to be, on the basis of which he will offer the State cooperation.

Now, the State may accept his cooperation, or the State may not accept his cooperation. If the State does not wish to accept his cooperation, there is no obligatory power that can compel the State to do so.

Mr. KINCHELOE. And therefore, if the State does not agree absolutely with everything that the Secretary of Agriculture says, why then he withholds his appropriation entirely from the State?

Mr. GREELEY. Yes, sir.

Mr. KINCHELOE. Your idea is to eventually concentrate the whole power in the Secretary of Agriculture through the Forest Service?

Mr. GREELEY. No, sir.

Mr. KINCHELOE. What do you call it if that does not leave it to the Secretary of Agriculture in the last analysis?

Mr. GREELEY. The worst that could happen to the State under this bill would be failure to obtain cooperation from the Federal Government in growing timber.

Mr. KINCHELOE. Absolutely; that is all the bill provides for.

Mr. GREELEY. What we seek to accomplish through this bill is to induce all of the States, or as many of the States as possible, to put into effect what the Department of Agriculture believes, after it has thoroughly studied each situation and consulted everyone who knows anything about it—what the Department of Agriculture believes to be essential to keep the timberlands of that State productive.

Mr. KINCHELOE. Now, under the good roads bill the Department of Roads, of the Secretary of Agriculture's Office, will not approve under any circumstances any piece of road in any State without it meets the approval of the State highway department of that State. That is cooperation. That is what I call cooperation.

Mr. GREELEY. Yes, sir; that is cooperation, but your State highway department has to build those roads in accordance with the standards of the Department of Agriculture.

Mr. KINCHELOE. Oh, absolutely.

Mr. GREELEY. If any State does not want to comply with the standards of the department, it does not get the Federal aid.

Mr. KINCHELOE. You are talking about cooperation between the Secretary of Agriculture and the State highway department. Now the Secretary of Agriculture and the Good Roads Department cooperate to such an extent that they will not approve, and therefore no Federal money will be available for any piece of road until they have the approval of that department.

Mr. GREELEY. Yes.

Mr. KINCHELOE. Now, I want to say that if that is going to be the purpose of this bill I will prophesy a pretty rough sledding in Congress before it gets through. The State can either take it or let it alone. It has a consultation. If you don't agree you don't get any money, notwithstanding you pay as much money for this fund as any other State. I am not talking about my State only, but all of them. It is not going to be in cooperation; you won't have much reforestation of the States whenever you don't have their approval, I don't think.

Mr. GREELEY. We know from our experience that we have very little difficulty in reaching an agreement as to what are the essential things in each region. We are doing a lot of substantial cooperation now in line with the general policy of this bill. We are now cooperating with 26 States in fire protection.

Mr. KINCHELOE. Well, you don't have a fund, you don't have that club to hold over them.

Mr. GREELEY. Yes; we have a small fund for fire protection only.

Mr. KINCHELOE. I understand.

Mr. GREELEY. This is a fund available to the several States. Certain States get as high as \$25,000 a year. We work out the requirements that must be met by the States. By using common sense on both sides, the work goes on and goes on well. I know if this bill is passed that we can carry on cooperation in a good spirit with a great number of the States. We have had experience for the past 11 years in working under this same principle in our fire protection.

Mr. KINCHELOE. Oh, with your fire protection that is true.

Mr. GREELEY. And because of that experience I am satisfied that the principle will work.

Mr. JONES. There is one other question that I would like to ask. Have you the figures, Col. Greeley, to show the total sale by the Government off of the land owned by the Government in the last year, or covering a period of years?

Mr. GREELEY. They now amount to about 810,000,000 feet a year.

Mr. JONES. Eight hundred and ten million feet a year?

Mr. GREELEY. Yes, sir; that is the timber that is cut each year.

Mr. JONES. Now, do you know what, about, is the average price per thousand feet?

Mr. GREELEY. \$2.78 per thousand feet.

Mr. JONES. \$2.78 a thousand feet?

Mr. GREELEY. Yes. The total income is something like two and a half million dollars.

Mr. JONES. Has that extended over a period of years, or just the last year?

Mr. GREELEY. It has been gradually increasing ever since 1905, when the national forests were put under the Department of Agriculture.

The CHAIRMAN. How much do the grazing fees amount to this year?

Mr. GREELEY. About two and a half million dollars.

The CHAIRMAN. Have they practically all been paid in?

Mr. GREELEY. No, sir; there are delinquencies to the extent of 15 per cent.

The CHAIRMAN. Is that likely to be collected?

Mr. GREELEY. I think it will all be collected before the 1st of next July.

Mr. SNELL. Mr. Greeley, may I ask you just one more question. Now is there any more final authority reposed in the Secretary of Agriculture by the provisions of this bill than there are in the highway department under the good roads bill?

Mr. GREELEY. I think not, sir.

Mr. SNELL. The final authority is just the same?

Mr. GREELEY. The final authority is substantially the same; yes, sir.

Mr. SNELL. Well, that was my understanding of the measure.

Mr. KINCHELOE. I am very familiar with the good roads act. There is a whole lot of difference between his construction of this bill and the good roads law.

Mr. SNELL. Well, as I understand this bill they are pretty much alike.

Mr. GREELEY. I think the two bills are very comparable.

Mr. SNELL. Yes.

Mr. GREELEY. Of course building roads can not be compared in any detailed way with the growing of timber, but the basic ideas of cooperation are the same.

Mr. SNELL. That is what I understood, that the basic ideas are the same; that is the same proposition.

The CHAIRMAN. I might state that before this committee the roads director went on record, giving his assurance that he would not insist upon hard surfaced roads; it is left largely to the State commissions, and if the State commissions decide on a type of road that is not hard surfaced he will approve of it.

Mr. KINCHELOE. But it has got to be approved by the State highway commissioners before they get any money.

The CHAIRMAN. Yes.

Mr. GERNERD. Mr. Kincheloe, to get your viewpoint, what is your idea of State cooperation?

Mr. KINCHELOE. Well, my idea is to meet with the State officials and let them have some say about it, and cooperate, not consult, and you will then get encouragement from the State officials.

Mr. GERNERD. Well, after all, consultation resolves itself into cooperation.

Mr. KINCHELOE. It says "cooperation" here, but his interpretation is that it is nothing but a consultation.

Mr. GERNERD. Oh, I don't think he means quite that.

Mr. KINCHELOE. I don't know about that.

The CHAIRMAN. Let us have the next witness.

(Mr. Greeley was thereupon excused as a witness.)

Mr. SNELL. Mr. Gaskill, the State forester of New Jersey, will answer some of the questions of what the States are doing along these lines.

The CHAIRMAN. Mr. Gaskill.

STATEMENT OF MR. ALFRED GASKILL, STATE FORESTER OF NEW JERSEY.

Mr. GASKILL. My name is Alfred Gaskill; I am State forester of New Jersey. I am also authorized to speak for the forestry departments of the following States: Alabama, California, Connecticut, Illinois, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Montana, New Hampshire, New Jersey, Ohio, Oregon, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

Needless to say, Mr. Chairman, I do not pretend to bring here the combined wisdom of these forestry departments. The chief thing which I wish to ask the committee to consider, bearing particularly upon the first section, or exclusively upon the first two sections of this bill, is that the forestry organizations of the various States have sought through a series of conferences to unite with the Forest Service upon the measure which seemed to us most practical and most likely to yield the results that would be most beneficial to each of our communities. We do believe that there has been brought together in this measure clearly the most acceptable principles, at any rate, that should govern.

Fundamentally, as has been brought out here, it is a cooperative measure. We perhaps are so used to cooperating with the Forest Service, and generally get along so well that it may have seemed to us—may still seem to us—a comparatively easy matter to find ourselves in agreement, or at least in a sufficient agreement for practical purposes. I do truly believe—in fact I know—that the forestry departments of these States to which I have referred, and which I am directly and specifically authorized to represent here, are satisfied with the terms of this measure, in so far as they affect the undertakings in these 19 States. Now that is a pretty generous majority of the States which up to this time have organized and maintained forestry departments of one kind or another. There are 31 of them all told.

It has been the effort of one State and another, progressively through the last 20 or more years, to establish something practical in forestry within their own jurisdiction. We have had from time to time encouragement, and sometimes material help, from the Federal Government. To the extent that that material help has been available, we have been able to get from our own people the means to carry on the undertaking which, in our understanding, has been for the best interests of those communities. I can not feel that in supporting a measure of this kind the States are doing any more than proposing to the Federal Government to help carry what is in very truth a national burden. I need not go into the question of the reasons or the need for this legislation. I think that has been done surely to your satisfaction.

We find ourselves in the various States with very definite problems before us. You will notice that the list of States that I named runs all the way from the Atlantic to the Pacific; from the north to the south. They are a very representative group and cover all sorts of conditions.

Reference has been made to some of the terms of the bill. In our judgment it is quite necessary that the provisions of the act itself be sufficiently broad to comprehend conditions as they are found in Massachusetts, in Oregon, and in Texas. That perhaps goes without saying.

You, Mr. Chairman, have referred particularly, I think, to the necessity of producing the timber of the future near where it is wanted. I think that that may be taken as the cornerstone of the whole discussion. The country to-day is drawing its supply of lumber from farther and farther and farther off, and as was said this morning, the freight on a thousand feet of lumber from the Pacific coast is now considerably more than the earlier cost of the lumber delivered. I do not deceive myself, not in the

slightest, respecting the future cost of lumber. When we get down to the cost of producing our lumber and then marketing it, conditions are going to be very, very different from what they have been in the past. I should not venture to say what the consumption will be any more than I should venture to say what the market price will be.

The CHAIRMAN. Are you familiar with the wholesale prices of lumber in the West?

Mr. GASKILL. Very little, Mr. Chairman. It has been years since I have had contact there. I would rather not undertake to go into any detail on that subject. I did know once on a time.

The CHAIRMAN. I have been told that lumber sold as low as \$8 a thousand.

Mr. GASKILL. As \$8 a thousand?

The CHAIRMAN. Yes.

Mr. GASKILL. I have seen first-class lumber sell on the Pacific coast for \$8 a thousand within my time as a forester.

The CHAIRMAN. Now the freight is about \$24.

Mr. GASKILL. To the Atlantic coast it is something about \$36. Well, Mr. Kellogg tells me it is about \$20.

Mr. KELLOGG. \$20 to \$25 to the Atlantic coast.

Mr. JONES. It is less to the Atlantic coast than it is to some intermediate points, is it not?

Mr. KELLOGG. I am quoting the rail rate.

Mr. JONES. But the rail rate is usually less from coast to coast than it is to some intermediate point, isn't that true?

Mr. KELLOGG. No, that is not true. The rate to Chicago is less than it is to New York.

Mr. JONES. But Chicago has water rates.

Mr. KELLOGG. Not from the west coast.

The CHAIRMAN. Can you give the rate from the Pacific coast to Iowa?

Mr. KELLOGG. I don't know; I believe it is between 60 and 70 cents per hundred pounds.

Mr. LONG. It is 66 per hundred pounds.

The CHAIRMAN. What is the rate to the Atlantic coast?

Mr. KELLOGG. The rate to the Atlantic coast, since the last reduction, is 90 cents per hundred pounds. It was \$1.06.

The CHAIRMAN. That is about \$18 a thousand.

Mr. GASKILL. The point I was making, Mr. Chairman, is that in my view the lumber of the future must be produced as nearly as it is humanly possible to the point of consumption, in order that the freight saving may offset the inevitable cost of production. Col. Greeley said here a few moments ago that we might be able to produce lumber in the future at from \$10 to \$15 a thousand.

Mr. KELLOGG. Stumpage.

Mr. GASKILL. As stumpage. I thank you for the correction.

The CHAIRMAN. Do you believe that can be done?

Mr. GASKILL. I think that is a very fair estimate, Mr. Chairman, based upon present costs and present conditions. You can not raise it for that, please understand, from the seed, I do not believe, anywhere, unless it be in very rapid growing sections of the far West or the South. But taking into account that in a very large part of our area we can depend upon natural growth for the next crop and a good many succeeding crops, it is probably a very fair basis.

The CHAIRMAN. Isn't it a fact that it costs more than twice that amount to grow it?

Mr. GASKILL. That it would cost more than twice that amount to grow it?

The CHAIRMAN. Yes.

Mr. GASKILL. No, I don't think so.

The CHAIRMAN. Well, I am basing that on the figures given here this morning. We have been told that the cheap land sells from \$3 to \$15 an acre. I have understood that it takes about 100 years to grow a merchantable tree, and based on \$5 an acre, compound interest at 5 per cent, you have \$500 an acre, and I believe the estimate here is 20,000 feet an acre. That would be about double that amount.

Mr. GASKILL. Mr. Haugen, it is very difficult to generalize in a matter of this sort in which so many factors of necessity enter. May I give you a little calculation which I made myself bearing upon this thing. Maybe it will be enlightening, although I do not pretend that it has any more merit. In the course of a discussion concerning the cost of producing timber I calculated what we could raise common pine for in New Jersey, and figuring on a land value of \$5 an acre, a planting cost of \$10—I forget the carrying charges—a 60-year rotation, that is 60 years to maturity, and 5 per cent interest, I bought out \$29 stumpage. Now, that is vased upon, you will notice, a very high establishment cost—\$15 an acre. It is based, upon the other hand, upon an average or perhaps a low rotation, a period of maturity. In the far West that can be very greatly

reduced. In the South it can be greatly reduced. In the North it probably won't be reached. I should not want to venture to commit myself to any positive figures respecting costs, respecting values, as I said before, because I find the necessary data are absolutely lacking.

We can, however, face the situation as it is presented to us. We have got in every one of our States, including the areas upon which active lumbering is now going on, great tracts of cut-over, burned-over, or otherwise denuded land, entirely or partially unproductive. Those lands are in immediate proximity with the users of lumber. If those lands do not produce lumber they are going to produce nothing. They therefore are either a burden upon the population, or in some sense contributors toward the needs of the same population. I can not see how we can get away from it.

In New Jersey we have got, if I may speak specifically for a moment—

Mr. GERNERD (interposing). I wish you would elaborate on what you have been doing in New Jersey while you are on the subject, Mr. Gaskill.

Mr. GASKILL. I do not want to be unfair to my neighbors and friends, but we have been working rather strenuously for some years there. Forty-five per cent of New Jersey's land areas is still forested, strange as it may seem. We estimate, from very detailed soil surveys, because our State has been more fully mapped perhaps than any other, that ultimately 1,250,000 acres of that land must remain in forests, entirely unproductive, unless it is growing the timber that we need. We are now producing barely one-tenth of the lumber that is annually consumed, side by side with this opportunity to grow it at home. The key of the whole situation in New Jersey—the key of the whole situation in every State throughout this country, in my deliberate judgment—and I have some knowledge behind that opinion—is that if we can stop the fires in New Jersey we produce the forests. If you stop the fires in Oregon you produce the forests. If you stop the fires in Pennsylvania you bring back Penn's Woods.

Col. Greeley has given us the assurance in the discussions that have taken place concerning this Federal legislation—discussions which originated with Col. Graves, and in which discussions a good many of us participated—we have come around to the complete agreement that from 75 to 85 per cent of this whole problem is forest fires. And we have Col. Greeley's assurance that if this measure becomes law it will be his effort to so strengthen the fire services of the various States that their lands, wasted or partly productive, shall be set to work to make the timber that we need.

Now I was asked to say a word about New Jersey.

The CHAIRMAN (interposing). Well, now, the remedy then is the protection against fire: that is the principal part?

Mr. GASKILL. The essence of the whole problem, Mr. Chairman, is protection against fire.

Mr. JONES. And if the National Government would cooperate fully in protection against fire you think the problem would work itself out, don't you?

Mr. GASKILL. Certainly, as a beginning. We are getting now from the Federal Government—the States at large—\$400,000 a year. Increased last year from a bare \$125,000. And it may interest you to know that as against that \$400,000—I say 26 States here: Col. Greeley says 29—are providing for this current year \$1,550,000 of themselves.

The CHAIRMAN. That is to be used in emergencies, isn't it?

Mr. GASKILL. Not at all, sir. That is to maintain the ordinary, every-day preventative measures.

The CHAIRMAN. How much for emergencies, then?

Mr. GASKILL. We haven't any in most States. A few States provide a contingent fund, but unless the legislature in the majority of cases happens to be in session, we simply have to let the fires burn. We got into that scrape last June, and in two weeks they burned up there in New Jersey more than we commonly burn in a year. Those conditions meet us.

Now one point that I want to make, Mr. Chairman, is this: The States, some of them, are working hard on this problem. A half a dozen or more, among them New York and Pennsylvania and Massachusetts and New Jersey, are going to win this game, and they are prepared to do it alone if they must. But they, too, want Federal help. Because every time one of us goes to our governor or our budget commission, or whatever be the fiscal authority, the more we can say that Congress stands behind us in a practical way, the surer we are to get the necessary support at home. You all understand how that goes.

There is another point behind all this. You can count almost on the fingers of two hands the States that are maintaining, or perhaps are able to maintain efficient forest fire services. We have, we think, got a good one in New Jersey, but we know

there is a whole lot wrong about it. If this problem is ever going to be worked out along the lines that we believe it must be worked out on, and that is primarily through fire control, there is no better way of getting the State working for themselves than to hold up the bait of Federal cooperation. I truly believe that is it—you can say it is narrow and it is small, and all that, as you please, but it works.

There are a good many sections of this country which have the land, which have the climate, which have every opportunity, to say nothing about markets for the lumber, to produce the timber that is needed, and cut out freight costs while they are about it, simply and solely by taking away this handicap that we have crowded upon nature, by refraining from turning over a new leaf. I guess that is the way to put it. We simply got into bad habits when the country had too large forests, and we have not been able to throw off those habits yet. I think that is what is the matter with us. It is not the lumbermen: it is not the officials: it is the everyday man, whatever be his vocation, whatever it be that takes him into the woods, whatever his interests—carelessness is abroad, and it is that which we must get away from.

Now, gentlemen, I have really nothing more to say. I have represented to you the desire of these 19 States to join whole-heartedly with the Forest Service in supporting a specific, definite piece of legislation which, in our judgment, is sufficient to meet the most important feature of the present emergency.

Mr. GERNERD. How many acres of timberland has the State of New Jersey acquired, or is held by the State?

Mr. GASKILL. I can answer that a little bit more fully by a set of figures, if I may.

Mr. GERNERD. Approximately.

Mr. GASKILL. New Jersey now owns as State forests a little over 17,000 acres, which, out of 2,600,000, is a pretty small quantity. And there is a story that belongs to that. When I was called to New Jersey 15 years ago as State forester, there was then, as there still is, a very strong belief that the only way to solve this forest problem was for the public to buy up the forests and administer them. I doubted that. I still doubt it. But under that doubt it became my duty, I guess, to advise the forestry commission of the State to refrain from advocating a policy of great State acquisition and see what could be done toward stimulating our woodland owners to do the thing themselves. I felt that the thing deserved a trial somewhere, at any rate, and New Jersey probably was as good a place as any to do it. First of all, because the large lumber interests had passed over; they were gone. The lumbering there, then and now, is in small hands, and with small units. There was, on the other hand, a considerable number of estate owners and people who were willing to go into the thing with more or less enthusiasm. The experiment is still under way, gentlemen. We have bought in 15 years, as I said, 17,000 acres out of something over 2,000,000.

We have got under forestry management, which is just as effective as that under State forests, approximately 200,000 acres of private lands. I am not ready to say to you or to any one that that is the way to work the thing out, any more than I could say that the State ownership and control is the only way. We are offering this thing as one of these experiments that must be undertaken in forestry. We probably can win out in New Jersey on that line. I don't know whether any other State could win out. Conditions there are perhaps favorable. And I ought to say in all fairness that one-half of that 200,000 acres of private land under management is in one holding. The other 100,000 acres is scattered in smaller portions.

Our forestry is based, first, last, and all the time upon fire protection. There is not a man who asks for assistance or advice who is encouraged to plant, or to expect much in the way of returns from his forests until the forest fire service covering his land has been made reasonably effective. Unless that is done it is a good bit of a gamble whether he is going to get out or not.

Mr. GERNERD. I am somewhat familiar with your State. It appears to me that the municipalities of Jersey City and Newark and a few other of those places have acquired thousands of acres of land for protecting their watersheds, and are planting trees constantly.

Mr. GASKILL. That is entirely true. If I may correct you with respect to the municipalities—but that is entirely apart from the question. There are several municipalities owning very considerable areas of upland from which they collect their potable water, which now are maintaining those reserves under forestry. The city of Newark has nearly 30,000 acres. The city of East Orange has between three and four thousand acres. And it may interest you to know that in the latter case within two weeks plans are making to use that water reserve as an outing ground for the Boy Scouts and similar organizations of the Oranges along with the forestry that has been done—has been done there for 12 years—and along with the conservation of the water to pump down to the city of East Orange. In other words, we are tying up water service, or water diversion, rather—it is underground water—water diversion, water supply, forestry, and recreation for the people of the near-by cities.

Mr. GERNERD. Exactly.

Mr. GASKILL. Newark has not got quite so far along. It is locking the door of its watershed, but I think they will learn after a while.

Mr. GERNERD. Well, they certainly have in the last five years done marvelous work. It has been under my own personal observation, and they certainly have done marvelous work along the line of replanting of trees and protecting.

Mr. GASKILL. On the Newark watershed.

Mr. GERNERD. Yes.

Mr. GASKILL. Yes; they have done most excellent work. It is wonderful; but as I say, they have locked the doors; they do not allow anybody to use it.

Mr. GERNERD. Yes?

Mr. GASKILL. Do you think that is right?

Mr. GERNERD. Well, I am not prepared to answer that right now.

Mr. GASKILL. No; perhaps it is not my province to ask questions, but rather to answer them.

Mr. GERNERD. I have been wonderfully impressed with what really has been done in the last five years under my own observation.

Mr. GASKILL. I have been working with those Newark people for 13 or 14 years on that thing out there. It has gone altogether too slowly. But the point that I meant was that they have burned down villages, devastated—depopulated, that is the word, not devastated, but depopulated that area up there with the intent of conserving the purity of their water supply. I hold that that is not good economics, simply because it is not necessary. Perhaps that is a matter of opinion. Mr. Chairman, I am at the service of the committee.

Mr. CLARKE. Well, that has been very instructive to me, Mr. Gaskill.

The CHAIRMAN. Has any member of the committee any questions they desire to ask? We are very much obliged to you, sir.

(Mr. Gaskill was excused as a witness.)

Mr. SNELL. Mr. Haugen, what is your pleasure? Do you want to continue further with the hearing this afternoon? We have several other men here. But we are entirely at your service, and if you wish to continue further to-night, or adjourn until to-morrow, we are at your service.

Mr. CLARKE. I move that we adjourn until to-morrow morning at 10 o'clock.

The CHAIRMAN. Very well; the committee will now adjourn until to-morrow morning at 10 o'clock.

(Thereupon, at 5.25 p. m. Monday, January 9, 1922, an adjournment was taken until 10 o'clock a. m. of the following day, Tuesday, January 10, 1922.)

COMMITTEE ON AGRICULTURE,
HOUSE OF REPRESENTATIVES,
Washington, D. C., Tuesday, January 10, 1921.

The committee met at 10 o'clock a. m., Hon. Gilbert N. Haugen (chairman) presiding.

There were present: Representatives Haugen (chairman), McLaughlin of Michigan, Purnell, Voigt, McLaughlin of Nebraska, Tinchler, Williams, Sinclair, Thompson, Gerner, Clague, Clarke, Jacoway, Aswell, Kincheloe, Jones, and Ten Eyck.

The CHAIRMAN. The committee will come to order. Mr. Ayres, of New Hampshire, has a request to make. Mr. Wason has introduced a bill, H. R. 9667, for the purchase of land under the Weeks act, and Mr. Ayres desires to make a statement with reference to the bill.

(The bill referred to is here printed in the record in full, as follows:)

[“H. R. 9667.]

“A BILL To authorize appropriations for expenditures under the Act of March 1, 1911 (Thirty-sixth Statutes at Large, page 961).

“Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby authorized to be appropriated for the fiscal year ending June 30, 1923, out of any moneys in the Treasury not otherwise appropriated, the sum of \$2,000,000, and for each fiscal year thereafter up to and including the fiscal year ending June 30, 1943, such sums as the Congress shall appropriate, to enable the National Forest Reservation Commission to carry out the purposes of the act of March 1, 1911, entitled ‘An act to enable any State to cooperate with any other State or States, or with the United States, for the protection of the watersheds of navigable streams, and to appoint a commission for the acquisition of lands for the purpose of conserving the navigability of navigable rivers,’ as amended.”

STATEMENT OF MR. PHILIP W. AYRES, FORESTER, SOCIETY FOR THE PROTECTION OF THE NEW HAMPSHIRE FORESTS.

Mr. AYRES. Mr. Chairman, the committee will be interested, I am sure, in the continuation of the acquisition of forest lands near the headwaters of navigable streams, which this committee has indorsed so many times and which it provided for in the Weeks law of 1911. That law needs to be continued for this year. Mr. Sydney Anderson has requested that this committee pass upon the policy of the Government in that respect, and for that purpose Mr. Wason has introduced a bill simply covering the appropriation for the current year, in order to continue that policy. We desire to ask for a hearing upon this bill of Mr. Wason, and Mr. Sydney Anderson requests that at as early a moment as may be the committee make a report on it. I would like to ask the pleasure of the committee as to this hearing.

The CHAIRMAN. You suggest that you be heard immediately following this hearing?

Mr. AYRES. Immediately following this hearing, in order that we might have the witnesses here. There are those who would like to come in from New England and the southern States.

Mr. TINCHER. Do I understand the Appropriations Committee find that they are without authority of law to make this appropriation?

Mr. McLAUGHLIN of Michigan. It can not be that; they have the authority. I really do not know what Mr. Anderson has in mind.

Mr. AYRES. The situation is this, gentlemen. When the budget was made up this item for an appropriation for continuing the purchase of forest land was omitted. Mr. Weeks has written a letter, which will come before you later, stating that he regretted it was omitted, that it was given to Mr. Gauss, but the matter had already gone to press and it was too late to get it into the printed budget. In view of this omission Mr. Anderson says that he feels that his committee needs a starter, that he needs to have the approval of this committee reestablishing the policy of the Government. I anticipate no difficulty from this committee, which has so often reaffirmed that policy, but Mr. Anderson would be glad if this committee would do so again.

Mr. CLARK. What does that involve along with it?

Mr. AYRES. It is merely a continuation of the appropriation.

Mr. ASWELL. The Appropriations Committee has the right to add this item on the floor if it so desires.

Mr. AYRES. Mr. Anderson so understands.

Mr. ASWELL. Why then should this committee have anything to do with it?

Mr. AYRES. He feels that he would be glad to have the policy of the Government reestablished by this committee.

The CHAIRMAN. Is it simply for the continuance of the Weeks Act?

Mr. McLAUGHLIN of Michigan. And there is a difference of opinion as to whether the authority continues under that act. This bill, if it should be favorably reported, would express the feeling of this committee as to the policy to be pursued in the future. Why can not that be made a part of the hearing? Let Mr. Wason and others appear right here in this connection.

The CHAIRMAN. That is for Mr. Snell to say.

Mr. McLAUGHLIN of Michigan. The same feature is contained in this bill that we have before us.

Mr. SNELL. To a certain extent, of course, the same principle is involved. The principle that is carried on in this bill that you have before you is really also in this special bill for a special appropriation at this time. And at the close of our hearing if you want to take this up and ask some special questions in regard to this individual bill, I do not know that that would in any way interfere with the regular program that we have at this time. The same people that are backing the present bill, H. R. 129, are also in favor of this bill, as far as I know. Personally I believe it would strengthen us if this individual bill again had the recommendation of this committee. If I remember correctly, there was a question about striking it out last year on a point of order. That was discussed for some time, but it was finally ruled in.

Mr. ASWELL. Would it not be ruled in again on that precedent?

Mr. SNELL. As far as we are concerned, we shall be glad to leave it entirely to the pleasure of the committee.

Mr. McLAUGHLIN of Michigan. It would seem to me that that feature of the bill is very important, inasmuch as you suggest an amendment of the law which would extend the use of the money.

Mr. SNELL. It is entirely harmonious with the legislation we are asking, and all the people that are in favor of H. R. 129 are very much in favor of this legislation also.

Mr. McLAUGHLIN of Michigan. Besides, the bill authorizes the appropriation of \$50,000,000—much larger than any appropriation suggested in your bill. So when

you say it is only a small part of this, it would seem to me to be quite an important part of it.

Mr. SNELL. That is not exactly the thought I intended to convey. I meant it was a part of the general legislation proposed here.

Mr. AYRES. May I offer one further explanation? The bill which we have under consideration to-day may take some time to work out, and Mr. Anderson's feeling is that he would like to have this special measure come before the committee and be promptly reported out, if possible, in order that the appropriation for this year may go through; and as his committee will take the matter up about the 1st of February, he hoped very much that this committee would give the matter its approval prior to that time.

Mr. TINCHER. Mr. Anderson does not think this bill is necessary, does he?

Mr. AYRES. Yes; this bill was drawn with Mr. Anderson's approval.

Mr. TINCHER. He argued here last year that it was not necessary, and had the point of order overruled and made the appropriation without it.

Mr. AYRES. He now says he would like to have the approval of this committee.

Mr. ASWELL. If everybody is favorable to this special resolution, why not pass it and be through with it now?

Mr. McLAUGHLIN of Michigan. Well, we do not want to extend this hearing any longer than necessary. These gentlemen who are so well posted on this question could very well, it would seem to me, be heard on it at this time—that is, on the question of Congress authorizing additional appropriations from time to time under the Weeks Act. We could then give Mr. Wason and his people an opportunity to be heard on the particular bill. It would be along the same line, and I do not see why these gentlemen can not very properly express themselves on the Wason bill in connection with this hearing.

Mr. SNELL. We can see no objection to that, any time you want to ask the questions in regard to that from any of our witnesses.

Mr. TINCHER. I think we ought to tell the department whether we are willing to give them a hearing on this bill immediately following the matter now in hand.

Mr. McLAUGHLIN of Michigan. I would give them an opportunity for a special hearing, if they want it, after these gentlemen have said all they wished to say on that particular subject.

The CHAIRMAN. Immediately following this hearing?

Mr. McLAUGHLIN of Michigan. Yes; unless we have something else fixed that would interfere.

The CHAIRMAN. Is there any motion to that effect?

Mr. CLARKE. I make that motion.

The CHAIRMAN. To have that hearing immediately following this hearing, but not to interfere with this?

Mr. CLARKE. To give this matter the right of way.

(The motion, being duly seconded, was agreed to.)

Mr. ASWELL. Mr. Chairman, before we begin this hearing, may I make an inquiry? Another sugar bill has passed the Senate. Could we not have a hearing on that immediately following Mr. Ward's hearing? That was understood several months ago. We have been waiting on Mr. Ward for about six months.

Mr. TINCHER. I believe both those bills have passed the Senate and have been referred to this committee.

Mr. ASWELL. Yes. If it is in order, I move that following the Ward bill hearing, which I understand is fixed for next Monday, we have a hearing on the other sugar bill. (The motion, being duly seconded, was agreed to.)

Mr. SNELL. Mr. Chairman, before resuming these hearings, I want to make a very brief statement in regard to a question asked by Mr. McLaughlin of Michigan, yesterday, relative to the skinning of the land. Personally I have very decided views on that matter, and as far as I know, from any conversation I have had with any of the proponents of this bill, we are all opposed to what is generally known as the skinning of the land. We expect that this bill will place some restrictions on individuals operating on their own lands, but as a recompense for these restrictions we expect to give them fire protection and certain relief, if possible, in regard to general taxation that will in part repay them for any restrictions that are placed upon individuals operating upon their private lands. I just wanted to make that explanation. That was my understanding and my belief in regard to this general legislation.

The CHAIRMAN. When you refer to taxation, you mean taxation by the States?

Mr. SNELL. Yes, sir.

We desire to present this morning Mr. R. E. Danaher, president of the California White and Sugar Pine Manufacturers Association and a member of the State Board of Forestry of California.

STATEMENT OF MR. RAY E. DANAHER, PRESIDENT CALIFORNIA WHITE AND SUGAR PINE MANUFACTURERS' ASSOCIATION, MEMBER CALIFORNIA STATE BOARD OF FORESTRY.

Mr. DANAHER. Mr. Chairman, in so far as I can present to you the majority views of the pine lumbermen of California I am going to try to do so. We are in favor of a permanent forest policy. We want this policy to do all that is necessary and at the least cost.

You have been told, or you probably will be told, that because the lumbermen in the past have done nothing it will be impossible to get them to do anything again in forestry matters or to ever get them to do anything in forestry matters. I am not holding any brief for the lumbermen and what they have done in the past, but I just want to call your attention to the fact that those conditions are not the same at the present time.

When the timber of the East was denuded there was timber in the Lake States, and the lumbermen could let their old lands burn up, and that was being done not only by lumbermen but by everybody else. There was no thought originally of conserving the timber, because there was no thought but what the timber would last forever. When they finished operating in the Lake States there was the southern pine, but now that some of us have moved out beyond the Rocky Mountains and to the Pacific coast we have gone as far as we can. We have been a more or less migratory industry, but we realize now that we can not go any farther. We realize that to perpetuate the lumber it is up to us to help. Our viewpoint in regard to that has changed, and I am not trying to convince you that it has changed for any other than a selfish motive.

In California and in a good many places in the West the productiveness of the valleys is brought about through irrigation. This irrigation demands water. The lumbermen want the valleys to be productive, because they want the people there so that they can sell their lumber close at home. So we are interested in that phase of preserving the timber on the watersheds—for a selfish reason, perhaps, but we are interested.

We are so interested in framing a timber policy that we are even willing to put our industry more or less under Government control. We have a good many ideas about what ought to be done before any permanent forest policy is definitely established in all its ramifications. We believe, as good business men, that before you enter upon the new business of growing timber you ought to have full information as to the amount of timber now standing. The estimates made yesterday by Mr. Greeley seemed rather small to me. I think that the estimate made by the lumber industry is about three thousand billion feet instead of two thousand two hundred and fifty billion feet. There are ways that that can be checked up to see whether we have more or less timber than we think we have right now.

We ought to know the area and the location and the productivity of the land on which we are intending to grow timber. There are many places and there is a good deal of land, especially in the West, where the growth would be slow and it would be expensive. It would be poor business for either the Government or the private individuals to try to grow timber there if there is enough land in other places where the timber will grow faster and where it can be grown at less cost.

Mr. ASWELL. Would you investigate and ascertain these facts before we pass this bill?

Mr. DANAHER. No; not before we pass the bill, but this is already contained in section 3 of the bill.

Mr. ASWELL. It is one of the provisions of the bill?

Mr. DANAHER. Yes.

Mr. TINCHER. What company did you say you were with, Mr. Danaher?

Mr. DANAHER. I am representing the California pine industry, as president of the Pine Manufacturers' Association. I am with the Michigan-California Lumber Co.

Mr. TINCHER. Do you belong to the unincorporated American Hardwood Manufacturers' Association? [Laughter.]

Mr. DANAHER. No, sir.

Mr. TINCHER. Do you know whether they want to be regulated by the Government or not?

Mr. DANAHER. Well, whether they want to or not—

Mr. TINCHER. Well, this is a peculiar thing. This bill brings to light a peculiar circumstance. We have had a good deal of talk about less Government in business for quite a while, and we have had some laws passed by this present Congress, the Sixty-seventh Congress, in which we have attempted to do some regulating. We have met with some strong opposition, not the least of which opposition is here now with a bunch of the greatest business men in the United States, advocating that they be regulated to an extent greater than any one has ever been regulated by the Government. I was just wondering what the explanation was.

Mr. DANAHER. I am not advocating the regulation just for the sake of regulation.
Mr. TINCHER. Certainly. I see almost every section of the bill provides for an appropriation. [Laughter.]

Mr. DANAHER. Nor am I advocating it for the appropriations.

Mr. ASWELL. You are advocating it for self-preservation, are you not?

Mr. DANAHER. For self preservation a good deal; yes, sir. What I am saying is that this forest policy should be based on knowledge. If you were going to manufacture some new article or going into a new business you would look up your markets and know what you could do. Besides finding out how much timber we have and how much land will grow timber, I think we ought to have a fair estimate of the amount of timber that will be used probably in 50, 75, or 100 years. And it seems to me that as the continental countries of Europe are not using the per capita amount of timber that we use in this country, when timber becomes more expensive we are not going to use so much timber here. There are a few special purposes for which you will have to use lumber, and if that special kind of timber can be grown that is the kind we ought to grow instead of trying to grow every kind just because we are using it now.

Mr. TINCHER. I think the question that the gentleman asked you was rather pertinent. Section 3 provides for an appropriation of \$3,000,000 to find out what we ought to legislate about, and then you advocate the legislation, and, along with it, this survey.

Mr. DANAHER. Well, I do advocate that, because we have found the Forest Service very reasonable. We have worked with them pretty closely out West, and we do not believe they are going to jump off into some timber policy or some regulation without knowing what they are doing. Personally I am pretty well convinced that if this bill were passed as it is now there would not be very much done until this information was gathered, other than protection from fire; and Mr. Greeley said yesterday that that was 75 or 80 per cent of what was needed to reproduce timber crops. The lumbermen are perfectly willing to do anything that is necessary. We do not want to do a lot of unnecessary work that is going to cost a lot of money.

Mr. CLARKE. Just how far has private enterprise in your own State cooperated with the State and National Governments in the way of putting up its own money against the Government's and State's money?

Mr. DANAHER. The State does not cooperate to any great extent; that is; there is no compulsory fire law in California.

Mr. CLARKE. You have a forestry department?

Mr. DANAHER. We have a forestry department.

Mr. CLARKE. How far has that gone? How old is it, and what has it done?

Mr. DANAHER. The legislature of 1918 passed that bill. It is only within the last two years that we have got anywhere in California. Everything we have done in California—and we feel that we have done a good deal—has been accomplished through cooperation, voluntary cooperation, on the part of the lumber industry.

Mr. ASWELL. You said "when lumber becomes expensive." What do you mean by that?

Mr. DANAHER. I mean just this. Lumber is the cheapest and most versatile of building materials—

Mr. ASWELL. Counting the freight rate now?

Mr. DANAHER. Counting the freight rate. A man that is building will not use lumber in his building if he can buy some other building material cheaper.

Mr. ASWELL. And still it is cheaper than any other building material?

Mr. DANAHER. As far as I know.

Mr. TINCHER. Your organization out there is quite a big lumber manufacturing company?

Mr. DANAHER. It is a lumber manufacturing association; an association of manufacturing companies.

Mr. TINCHER. How large are the timber holdings of those companies?

Mr. DANAHER. Do you mean in acres?

Mr. TINCHER. Well, yes.

Mr. DANAHER. I could not tell you.

Mr. TINCHER. About how much timber do you cut each year?

Mr. DANAHER. The members of that association cut about 950,000,000 feet a year.

Mr. ASWELL. You represent then, practically all of the lumber industry in that section, do you not?

Mr. DANAHER. No; I misquoted there. The members of the association cut about 750,000,000 feet a year, and there is about 950,000,000 feet cut in the State.

Mr. TINCHER. What measures is your association taking now to perpetuate the forests after you cut the timber off?

Mr. DANAHER. Well, as I said, we are rather new out there in this matter of forest policy. There has been nothing done in the State. There is no law—no compulsory law.

Mr. TINCHER. I understand, but you have an association of the owners of this land, and you cut out so much timber a year. What is your association doing toward perpetuating that forest?

Mr. DANAHER. Practically every member of the association in 1921—that is, every member with a cut of 10,000,000 feet a year or over—placed its lands, both timbered and cut over, under the supervision of the Forest Service, for fire prevention and suppression.

Mr. CLARKE. In California alone?

Mr. DANAHER. In California—and paid the cost to the Forest Service.

Mr. TINCHER. Let me understand you. Your association, as an association, meets. You have rules and regulations to govern your association. Now, as an association, do you have any requirements that your members do anything toward reforesting these cut-over lands?

Mr. DANAHER. No, sir; our association is entirely a manufacturing association. That matter is handled through the California Forest Protective Association, which is a member of the Western Forestry and Conservation Association.

Mr. TINCHER. In cutting over this timber do you have any regulation about leaving certain seed trees?

Mr. DANAHER. There is no regulation now, but it is the general practice to leave certain trees, because they are not fit to take in, because something is wrong with them or they are too small to take in profitably, and those will seed and reproduce.

Mr. TINCHER. How much an acre does your association expend for fire protection?

Mr. DANAHER. Our association as an association does not expend anything. The individual members have maintained their own fire control and put the lands under the supervision of the Forest Service.

Mr. SNELL. Is that the Federal Forest Service, or the State?

Mr. DANAHER. The Federal Forest Service.

Mr. ASWELL. That seems to me to be very commendable.

Mr. DANAHER. That was entirely voluntary cooperation, and that is why we in California believe that we can get a long way with cooperation.

Mr. JONES. Does not that policy that you are pursuing tend to rehabilitate these cut-over lands and bring them back?

Mr. DANAHER. Yes, sir; we have thousands and thousands of acres in California of privately cut-over lands that are growing new forests.

Mr. JONES. They are growing new forests under the present law and under the present policy?

Mr. DANAHER. Under the present policy, yes; without any particular care being taken of them, because fire does not happen to come along, or if it does, somebody puts it out.

Mr. JONES. If the Government, with or without cooperation, maintains a fire protection, and pursues its present policy, will not the problem work itself out pretty well without the necessity for all this additional legislation—if they make adequate appropriation for fire protection under the present policy and present law?

Mr. DANAHER. I think that in our locality for the present it would, but eventually you have got to have a permanent forest policy that is built up on knowledge and that is just to all, in order to develop and produce enough timber to supply this country.

Mr. JONES. Is not that largely a matter of experience, anyway, in dealing with and handling this subject?

Mr. DANAHER. I think the working out of the details of such a policy is entirely a matter of knowledge and experience.

Mr. JONES. A witness yesterday afternoon who represented quite a few of the State forestry associations—I think of some 19 States—said that the principal element in letting such a condition work itself out was the matter of fire protection. That is the reason I was asking whether, if the Government would do its part toward getting adequate fire protection, the self-interest of these various organizations would not cause them to work the problem out individually and as associations.

Mr. DANAHER. Mere self-interest in that matter would lead us to protect our standing timber and our cut-over lands until we reached such a point that our cut-over lands were greatly in the majority?

Mr. JONES. Well, that would be a long, long time, would it not?

Mr. DANAHER. For every individual company it would not. For instance, our company may have a long run and another company have only 10 years' life and a great preponderance of cut-over lands. Now, if that is not helped, evidently what they will do will be to withdraw their protection from those cut-over lands and concentrate entirely on their standing timber.

Mr. ASWELL. When they cut their timber out and move away, what becomes of the cut-over lands?

Mr. DANAHER. Somebody has got to take care of them; because the individual, under present conditions, could not afford to go into the timber-raising business.

Mr. JONES. Do you think the Government ought to undertake an expensive proposition that no private concern can afford to undertake?

Mr. DANAHER. I do not think that the Government ought to undertake any expensive proposition that a private concern can not afford to undertake; but I do believe that this would be a paying proposition in the long run if you do not have any taxes to pay and if you could borrow your money as cheaply as the Government can. With a low rate of interest and no taxes the raising of timber is going to be a paying business if you can keep the fire out.

Mr. TINCHER. You feel that the perpetuation of the forests is wholly a public function?

Mr. DANAHER. No, sir; I do not feel that it is wholly a public function.

Mr. TINCHER. Well, you think the public should restore, at large expense, the private forests that have been destroyed?

Mr. DANAHER. No; I do not think that. I do not think the public should restore, at large expense, the private forests that have been destroyed. But I do think that in most of that country, where forests will grow naturally if you keep fire out, the expense will be relatively very small.

Mr. JONES. Do you not think that if the fire is kept out the companies that have large cut-over lands will take care of these cut-over lands in order to perpetuate the company and protect its interests and will do the most of this themselves?

Mr. DANAHER. They will do a lot of it. We will do all we can afford to do. The tax question enters in there so strongly that we do not know now what we can do.

Those counties are all hungry for money. Most of the timber counties have very few people; the population is small. Their resources, outside of their timber, are small, and timber in most of those counties is bearing the big burden of taxation.

Mr. TINCHER. Do you think the timberlands ought to be exempt from taxation?

Mr. DANAHER. No, sir; we are willing to pay a fair amount of taxes on our cut-over lands and protect them, as a business proposition.

Mr. JONES. Do you want the State in taxing these lands to make an allowance for the cut-over lands and tax them at a much less valuation?

Mr. DANAHER. Theoretically, yes. Practically, no. The assessments are made by a county assessor. The county has a certain amount of money to raise, and if your land has gone into cut-over land, assessed at \$3 an acre, the assessor must, in order to raise the necessary amount of money, increase your tax on your standing timber.

Mr. JONES. Well, if you exempt the cut-over lands from taxation, then you have got to pay that additional amount, whatever tax is necessary, to raise the budget fund on the standing timber. All the taxes must be paid in the county?

Mr. DANAHER. Yes. I do not believe that all cut-over lands should be entirely exempt from taxation. It can be worked out eventually through educating the public, and I do not believe the industry should be subsidized by not paying any taxes.

Mr. ASWELL. I think that point is not quite clear. Of course, the individual can not protect the forests against fires, particularly after the sawmill companies have cut out their holdings and moved away. For that very reason it would seem that the Government should take hold of it. It is just as in the case of floods. The individual can not protect himself against the overflow of the rivers, and the Government steps in and does that. The same principle applies here.

Mr. DANAHER. The individual, as a general rule, can not protect them, but there are some men or some corporations out there that could go into the business under certain conditions.

Mr. ASWELL. As a general proposition they could not?

Mr. DANAHER. Not as a general proposition, and not at all at this time.

Mr. TINCHER. Do you think the manufacturers should be authorized by law to curtail the production of lumber?

Mr. DANAHER. Well, that is a leading question. As a matter of conservation, or for what reason?

Mr. TINCHER. Well, we have got the boys in here now asking to be regulated, and I want to know what you want, and I am trying to find out.

Mr. DANAHER. I have not given that question enough study to say "yes" or "no."

Mr. TINCHER. That is a remarkable business that you are in, that you have not thought enough about it to know whether you should have the right to curtail the production of lumber. That is a question that has been discussed considerably.

Mr. DANAHER. Possibly it has. It would seem to me that the law of supply and demand and economic conditions would regulate that without any combination or anything else. If I can not sell my lumber after I cut a certain amount I am going to quit cutting until I can sell it.

Mr. TINCHER. Oh, well, if it were lawful for you all to get together and agree to produce only so much, it might have a slight effect on the price you could sell it for.

Mr. JONES. It might not be very slight.

Mr. TEN EYCK. How much did your State pay last year toward this particular work that you are advocating now?

Mr. DANAHER. I could not tell you that; I have not the information.

Mr. TINCHER. Do you suppose any member of your association planted any forest trees last year?

Mr. DANAHER. No, sir; I do not think so.

Mr. TEN EYCK. Is there any way that we can obtain the information as to how much your State has expended as a State annually?

Mr. DANAHER. Well, the appropriation has been very small. I think the last biennial appropriation was \$150,000.

Mr. TEN EYCK. The reason I wish to bring that information out is that New York State has spent a great deal of money in protecting its forests. California evidently has a great deal more timber than New York State, and I want to know the proportion of the expenditure between the two. New York will have to pay a considerable proportion toward protecting California's forests.

Mr. DANAHER. That is so; but New York State, raising its own money, can afford to pay pretty near the freight cost from California.

Mr. JONES. Has your association taken any steps in the last year or two to curtail the production of lumber?

Mr. DANAHER. No, sir.

Mr. JONES. Has it taken any joint steps to control the price of lumber?

Mr. DANAHER. No, sir.

Mr. JONES. No effort has been made along that line?

Mr. DANAHER. No effort at all.

Mr. SNELL. May I make a short reply to the gentleman from New York? One reason why our State has done so much, of course, is this: We own 1,500,000 acres; the State itself owns that. I think maybe the State of New York has done as much as, if not more than, any other State along this line.

Mr. TEN EYCK. Yes; I can appreciate that. We only get about \$10,000 a year now from the Government, which is a very small percentage of what we expend.

Mr. KINCHELOE. Does California own any timberland?

Mr. DANAHER. A very small amount. It is mostly in timber reserves for park purposes.

Mr. TEN EYCK. Well, that is what New York is holding it for—the Adirondack Park, for example.

Mr. DANAHER. Well, that is not for conservation purposes.

Mr. JONES. At what price do the members of your association sell the lumber that they principally produce?

Mr. DANAHER. Well, there is such a range of price according to grades that it would be hard to say.

Mr. JONES. Take a specific grade. Do they all sell at practically the same price?

Mr. DANAHER. This year there has been a variation in sales originating at about the same time of as much as \$10 a thousand.

Mr. JONES. At the same time?

Mr. DANAHER. At approximately the same time; yes, sir.

Mr. JONES. Was that because of the freight rate, or because of the locality, or what was the occasion for the difference in price?

Mr. DANAHER. Why, it was because one fellow needed the money, or where he did not have the information available as to how much of that kind of lumber there was, or what the market price was—what a fair price was on it.

Mr. KINCHELOE. The low fellow sold too cheap, did he?

Mr. DANAHER. The low fellow sold too cheap.

Mr. JONES. And there would be a difference of \$10 at the same time on the same grade of lumber in the same State?

Mr. DANAHER. Yes, sir.

Mr. JONES. Is that an exception, or is that the general rule?

Mr. DANAHER. Oh, it does not generally range that high. This was a bad year in the lumber business.

Mr. CLARKE. Is not the true explanation that the fellow needed the money?

Mr. DANAHER. Sometimes; yes, sir.

Mr. JONES. Would you be in favor of the Government regulating the method of cutting and utilizing timber? Would you favor just having a man up here in Washington to say how you should cut the timber and how you should utilize it?

Mr. DANAHER. Before I could answer that question I would have to explain that the lumber industry feel that they are entitled to a voice in this matter; that is, to sit in council and advise. As I have said, we have found the Forest Service very reasonable.

Mr. JONES. But it was Col. Greeley's testimony yesterday that he understood, in his construction of this bill, that the Secretary of Agriculture would be the final authority and have the final say in these matters. Now, I want to know if you would be willing for him to have the final say, and to determine the method of cutting and utilizing the timber?

Mr. DANAHER. Did not Col. Greeley qualify that statement by saying that while the Secretary of Agriculture would have the final say he would undoubtedly take into consideration the advice and counsel of the lumber industry and consider practical forestry methods, logging methods, and so on?

Mr. JONES. Yes; but he could then discard that or accept it, as he saw fit. He might disagree with you. What I am saying is, Would your association be willing for him to have the power to determine those things? Of course, he or any reasonable man probably would consult you, but would you be willing to have him determine the method of cutting and utilizing the timber?

Mr. DANAHER. Yes, sir.

Mr. JONES. Absolutely.

Mr. DANAHER. Yes, sir; absolutely. Because I think after he had consulted us all and we have cooperated and tried to fix these things up and give him the best advice through the Forest Service I can not conceive of his throwing all that advice away and setting up a theoretical regulation. After all there is nothing in this bill that compels us to accept it.

Mr. JONES. You are willing, then, to turn over to his judgment the method of conducting your business?

Mr. DANAHER. No, sir; because there is nothing in this bill that forces us to cooperate if he sets up something that is absolutely unreasonable.

Mr. KINCHELOE. But if the State of California passes an act requiring you to you would.

Mr. DANAHER. The State of California would not.

Mr. JONES. But if the State of California makes certain regulations and the State officials accept those, then you would be forced to do business.

Mr. DANAHER. We would be forced to do business if we did business.

Mr. JONES. Now, do you think it is wise to establish a policy that might ultimately result in the complete regulation from Washington of all your methods of doing business?

Mr. DANAHER. We are taking a good deal of this on faith. We believe that people as an ordinary thing are reasonable, and we are willing to take a chance in order to get a permanent policy that we think is the best thing, so that we can go ahead and develop this along reasonable lines. If we were at all afraid that the Secretary of Agriculture would set up essential requirements that were impracticable, we would not be here advocating them.

Mr. JONES. There are a lot of men in other lines of business that objected after the departments here in Washington put into force and effect methods and regulations of doing business all along the line. I was wondering if you did not have the same fear that that might develop—perhaps not under the present Secretary of Agriculture, but we are adopting a more or less permanent policy here. Do you not sense some danger along that line?

Mr. DANAHER. There is a possible danger; yes, sir. I do not think there is a probable danger.

Mr. TEN EYCK. I believe in the conservation of our natural resources, reforestation, and I also believe in scientific utilization of our forests. Can you tell me what you have done before the State Legislature of California to obtain the policy which you are now proposing for the Federal Government?

Mr. DANAHER. Yes, sir; I can tell you what we did. We were not successful. We went up there and lobbied, to use a common expression, and did everything in our power to get them to pass an adequate appropriation; but the people of California, as is the general rule of the people in the Western States, as was expressed yesterday, have not become violent conservationists. They are more interested in having industry go on and cut trees down and employ men in the production of capital than they are in the forests.

Mr. TEN EYCK. What was their answer to you?

Mr. DANAHER. The answer was that the budget was so big that they could not do it, and that there were other things of more importance.

Mr. TEN EYCK. Then the next thing that you did was to ask for an appropriation from the Federal Government?

Mr. DANAHER. Under this cooperation. A considerable part of that is private industry, and we believe that as a matter of education, if the Federal Government will cooperate, that our legislature would see the light and help us.

Mr. TINCHER. I understood you a little bit ago to say to Mr. Jones that if the regulations were not satisfactory, you would not cooperate, your company would not have to cooperate because it is voluntary on your part. This is a subject for Congress to legislate on. You do not suppose that it would hardly be right to allow the parties to decide for themselves whether they would cooperate or not?

Mr. DANAHER. I do not know why. I think you are going on the supposition that every phase of this bill is needed, or no bill at all. We are cooperating out there now without any laws. We are cooperating with the Forest Service. The Forest Service and the lumbermen are cooperating out there with the State forestry board.

Mr. TINCHER. Now, let us see if you are cooperating. You are fighting fire. Of course, any fellow would do that. You do not have to tell him or lead him to rush in and fight a fire. You are cutting smaller trees to-day out in your country in your association, perhaps, than you ever did in the history of the country. About how much forestry conservation have the lumber companies engaged in?

Mr. DANAHER. It depends on what you mean by forestry conservation. There are two schools of thought in the raising of timber. One is to take the more suitable timber, and I am now talking of the pine country of California, and in the West, to take all of the merchantable timber, all of the timber that will make salable lumber on the ground, with the exception possibly of a few seed trees.

Those seed trees do not need to be awfully old and big and of the best stock. They can be defective trees, or they can be the undergrowth trees that are positively too small to make real merchantable lumber, and then to reforest and restock that through natural processes instead of planting trees and by protecting them from fire, allow them to come up from natural processes and grow a forest.

The other school advocates selective cutting; that you go in and the trees are marked out and that you can take that tree, and you can not take this tree and that you could those two trees over there, but you can not take this tree, and that you can only take trees of a certain size, and that you must leave the smaller trees.

Now, if you are going in for that selective cutting method, it means a great expense, and it means that if when you leave a certain number of these trees that are now valuable for lumber, you expose them to the danger of fire, because the fire risk is a big thing, and it has been impossible and probably always will be impossible to keep the fire out, and if a fire runs through there it will kill those trees.

Mr. TINCHER. Now, as I understand you, you do not advocate the school of selective cutting?

Mr. DANAHER. No, sir.

Mr. TINCHER. Who does advocate that; do you know anything about who advocates that? Has any State of any consequence adopted that course?

Mr. DANAHER. I do not know about that.

Mr. CLARKE. Under this bill, could not the Secretary withhold appropriations?

Mr. DANAHER. I think he can; yes, sir.

Mr. CLARKE. So that it would be very objectionable if he took that course, then?

Mr. DANAHER. No, sir.

Mr. TINCHER. You said that it could be. Has it been tried anywhere that you know of?

Mr. DANAHER. I do not think so. It is not being tried in the West that I know of. Now, the Government regulations at the present time do not call for selective cutting. They used to.

Mr. McLAUGHLIN of Michigan. Is not that the method that is used by the foresters, where they select the timber, and is not only a part of it to be cut?

Mr. DANAHER. Well, they leave certain trees, but they take practically everything just now that is merchantable timber.

Mr. SNELL. How small down do they cut the trees? That is, how big does a tree have to be before you consider it merchantable timber, and what sized trees on the average do you leave, and how many per acre?

Mr. DANAHER. Well, that is a hard question to answer, because it depends upon the general logging conditions.

Mr. SNELL. What sized timber do you take, 10 inches or a foot, or what, as a general proposition?

Mr. DANAHER. That depends upon the general logging condition. That is a proposition that depends upon the condition, the logging condition, the part of the country, whether it is rough and whether it is a hard place to get the timber, or whether or not it is an easy place to get out of. You can afford to take smaller trees that will produce a lower quality of lumber if they are located in an easy place to get out, and if they are in a hard place you would leave those trees.

Mr. SNELL. Well, as a general lumbering operation, how small do you cut them?

Mr. DANAHER. We cut—in pine—we cut down to about 16 inches at the present time.

Mr. SNELL. Nothing less than 16 inches?

Mr. DANAHER. Not very much.

Mr. SNELL. Then you leave quite a good deal of standing timber on an acre when you get through?

Mr. DANAHER. No; there is not a great deal. Conditions in California are different. They have less small growth there.

Mr. SNELL. I know that the conditions are different there, and that is the reason why I want to have you explain.

Mr. DANAHER. There may be two or there may be three or there may be half a dozen of those small trees left standing.

Mr. McLAUGHLIN of Michigan. On an acre?

Mr. DANAHER. On an acre. It depends on the pine and the hillside you are on and on so many conditions that it is impossible to say just what would be left.

Mr. McLAUGHLIN of Michigan. The trees you speak of as being left are good for seed trees, are they?

Mr. DANAHER. Yes, sir; they are mature enough to produce seed.

Mr. TEN EYCK. Don't the cutting of the trees off of the hillsides or the mountains cause erosion by perm'tting the top soil to wash away? If some of those trees were left, would they not protect the soil?

Mr. DANAHER. Well, the small trees would not have much to do with it, because you do not get enough underbrush to protect the soil from erosion.

Mr. TEN EYCK. Is it not the lumbermen and the other individuals who do not clear up or burn the slash that makes the timber lands liable to fire?

Mr. DANAHER. Yes, sir. The destruction of the slash is a very important question.

Mr. TEN EYCK. What do you do with your slash?

Mr. DANAHER. It is not easy to say. Out in California there is no compulsory law. A year ago, in December, 1920, the State forester called a meeting of the pine-lumber men to discuss this question, and we had a good big meeting.

and put it up to them to see if they would promise for the season 1921 to dispose of their slash in some manner.

There are several ways that it can be done. You can pile the brush and burn it. That is one way to do it, and it costs about \$15 an acre. Or you can just burn it as it lays, or you can burn fire trails around it and protect it and leave it there; but the question was to make some disposition of their slash. The lumbermen promised to do that, and our report, and the foresters' report, both on December 30 showed that 70 per cent of the lumbermen in the State had acted on it, and the lumbermen who cut over 10,000,000 feet per annum had disposed of—had made an effort to dispose of—their slash during that year. That was done under that suggestion.

Now the State forester has called another meeting for the 25th of this month, at which time we are going to again take up with the lumbermen this slash-disposal question, putting up to them two or three alternate propositions to see just what they want to do. They can follow out the Forest Service method of piling and burning their brush or in burning it in two or three other ways.

Mr. TEN EYCK. You say that 70 per cent made an effort?

Mr. DANAHER. Seventy per cent made an effort.

Mr. TEN EYCK. What percentage of the slash have they burned?

Mr. DANAHER. Well, I think that last year practically all of the slash was burned. It was not entirely cleaned, but it was handled to such an extent and burned up to such an extent as to protect the slash so that there would be less fire menace.

Mr. KINCHELOE. You answered Mr. Tincher's question, that the only thing your association did out there toward reforestation was to fight fire.

Mr. DANAHER. Fight fire; and in that connection Mr. Greeley made the statement that fire fighting was at least 75 per cent of this question. We believe that on the Pacific coast, in the States west of the Rocky Mountains, that fire prevention consists of at least 90 per cent of this question.

Mr. KINCHELOE. Could you not do that under the present law if Congress just simply increased the appropriation?

Mr. DANAHER. Yes, sir; you can fight fire under that.

Mr. CLARKE. Is there not a great deal of difference because of the country? On the west coast you have a great deal more of a problem, west of the Cascade Range, and east of the Cascade Range you get the white pine. So that this problem differs a great deal in different localities.

Mr. DANAHER. It absolutely differs.

Mr. TINCHER. Has any effort toward reforestation or tree planting been made by any of the States, the planting of new trees?

Mr. DANAHER. I understand that some of the States are planting trees. My understanding is that they are planting them in Michigan. I think they are planting in Massachusetts, and possibly in New York State.

Mr. SNELL. They are planting thousands of them. The State of New York is doing that without any Federal assistance.

Mr. DANAHER. The State of New York; yes.

Mr. TINCHER. They are showing some speed themselves at home.

Mr. SNELL. I understood you to say that you have a certain amount of co-operation between the States and the special committee of the lumber associations in your State. I wish you would explain briefly just how that works out and just what is being done.

Mr. DANAHER. Well, that is what is known as the California Forestry Committee, formed about two years ago, at a time when the lumber industry and the Forest Service did not agree at all and the State forestry office did not think much of the Forest Service and the Forest Service thought less of the State forester. So there was a kind of a three-cornered fight, and for the purpose of trying to bring the different parties of interest closer together we called a meeting and eventually formed the California State Forestry Committee, having representatives on that from the forestry school of the University of California, the United States Forest Service, the State board of forestry, and the State forester's office, the redwood lumbermen, through their association, and the pine-lumber industry.

We got together to see if we could not agree, and we could not agree on anything at first. Finally, we started down the line, on different things, to see if we could not agree on certain things, and we got a list of three or four things, on forestry methods we could agree on; but after we got better acquainted and talked matters over, and got the other man's point of view and really tried to understand what he was hitting at, we developed a spirit for

good feeling out there, and there is to-day a feeling on the part of the industry, the lumber industry to-day, that the State board and the Forest Service are not trying to put anything over on them; that they can be trusted, and there is a feeling on the part of the State forestry service that the lumbermen are cooperating, and there is a feeling on the part of the State board, and the State forestry service that the lumbermen are cooperating with them, and there is also a splendid spirit of cooperation between the State forestry service and the United States Forest Service.

Now, this is where we are able to make one advance in the protection of the slash over what the State board was able to do. We employed one man from the forestry service, a man whom they could not afford to employ, because they had no money, and the reports are joint, being forwarded both to the State and to the forest service.

Mr. SNELL. Then, you have actually proved that you can bring about cooperation and get together the Federal service, the State service, and the individual landowners in the State of California?

Mr. DANAHER. Yes, sir.

Mr. TINCER. Are you not afraid that you will develop such affection between you, such an Alphonse and Gaston feeling, that the public is liable to get leary of it? We are still paying an awful price for lumber.

Dr. DANAHER. I do not see any chance. But this is a good proposition.

Mr. KINCHELOE. I want to find out how you will work under this bill. I understood you to say that at least 90 per cent of the forest lands of California are owned by private individuals?

Mr. DANAHER. No; I do not think I said that. I did not mean to.

Mr. KINCHELOE. How much of it is owned by private individuals?

Mr. DANAHER. I think it is around—some place around 50 per cent. There are three or four big forests, national forests, in California, and I doubt if it would be over 60 per cent owned by individuals.

Mr. KINCHELOE. Well, there are millions of acres owned by private individuals in California?

Mr. DANAHER. Yes, sir.

Mr. KINCHELOE. Do you think, if this bill should become a law, hereafter the Federal Government is going to cooperate with the State of California in the reforestation of these forest lands, at least to the extent of fire fighting? And if the State of California should come across and appropriate 50-50 with the Federal Government, then this money would be available for the reforestation of millions of acres owned by private individuals, allowing them to fight fires and everything that is necessary for reforestation, which, of course, would enhance the value of these millions of acres owned by individuals, by the taxpayers' money, from which they would get no direct benefit or the only benefit that they would get would be a better scheme of reforestation of these lands, at the expense of the rest of the country. Is not that true?

Mr. DANAHER. No, sir; I do not think that is quite the way it would work out.

Mr. KINCHELOE. Well, I would like to know under this bill how it would work out, then?

Mr. DANAHER. The general theory of the forest economists is that at least half the cost or more of protecting that timber would be paid by the individuals or by private owners.

Mr. KINCHELOE. Well, I am talking about this bill.

Mr. DANAHER. Well, under the terms of that bill.

Mr. KINCHELOE. Well, let us see. Section 2 says:

"That in no case other than for preliminary investigations shall the amount expended by the Federal Government in any State during any fiscal year under the foregoing section exceed the amount expended by the State"—not by individuals—"for the same purposes during the same fiscal year, including the expenditures of forest owners required by State law," etc.

So the facts are that the Federal Government is not going to expend more money in California than your State legislature is going to appropriate.

Mr. DANAHER. No, sir.

Mr. KINCHELOE. The Secretary of Agriculture is not going to look for any private contributions you have to make as individual owners, and the Federal Government is going to spend dollar for dollar that the State Legislature of California appropriates.

Mr. DANAHER. Yes.

Mr. KINCHELOE. The result is that it is going to enhance the value of the property of private individuals out there to the extent of millions.

Mr. DANAHER. Well, but the Legislature of California would not appropriate enough money to look after the private land in the State entirely, and the lumber men have to put up nearly two for one for what the legislature will appropriate. That is the way it is working out in other States.

Mr. KINCHELOE. I understood you to say a while ago that the State of California owned but very little of this forest.

Mr. DANAHER. Well, I did say that, but the fact is that there is a lot of State land in California. Most of it is down in the foothills, and it is not what we, out there, consider real forest lands. There is some timber on it now, and some of it is now in forest, but it is not land that you would expect to use for the growing of timber, because it would probably be of greater value for agricultural purposes, for the raising of fruit.

Mr. KINCHELOE. But the fact remains, whatever money the State of California would get from you under this bill, from the Federal Government, or whatever money it would appropriate that was expended upon these millions of acres privately owned would be of the greatest service to the individual owners concerned?

Mr. DANAHER. Yes, sir; and the individual owner has to have some help, if he is going to look after these things. The point is going to be reached after a while where he can not bear all of the burden of looking after cut-over lands, and pay the taxes that are required.

Mr. KINCHELOE. But the fact remains that this would be a very attractive proposition if this bill is passed, so far as the private ownership of these millions of acres of land out there are concerned, would it not?

Mr. DANAHER. I do not think I quite get your meaning. There is this about it: The owners are to-day in every State in the West, practically, paying all the cost of looking after their own lands.

Mr. KINCHELOE. Yes; they certainly are protecting their own property. That is a natural thing for them to do. What I am talking about is that the total expended by the Federal Government and your State—and if the State of California, the legislature, appropriates money that is expended on these millions of acres of private individuals, it is just that much gratis, so far as the individuals are concerned. That is what I am talking about. I can see no great patriotic purpose for a fellow to look after his own property and protect his own timber. If my house catches on fire it would not be patriotic for me to put it out if I can; but I am talking about this money that comes out of the taxpayers to the Federal Government and the taxpayers to California for the protection of these millions of acres. That is going to enhance your property, and it is so much gratis.

Mr. DANAHER. Certainly, and for this reason—

Mr. KINCHELOE (interposing). Because you will not sell this timber any cheaper. The private individuals are not going to sell their lumber any cheaper when this bill is put upon the statutes?

Mr. DANAHER. The taxpayers would not be required to look after the protection of our forests.

Mr. KINCHELOE. Why, this bill says so.

Mr. DANAHER. It may give that impression, but that is not the way it works out; the way that I understand it works.

Mr. KINCHELOE. You mean to say that this appropriation would not be expended for fighting fires?

Mr. DANAHER. Yes; I think some of this would be expended for that purpose.

Mr. KINCHELOE. So, to that extent, you would benefit by it?

Mr. DANAHER. If I may, I would like to call your attention to this meeting called by the State board of forestry of California for the 25th. We are going to submit to the lumbermen a plan and ask them to cooperate with the State board, and through the State Board with the Forestry Service, by placing all of their lands under the control of the State board for fire fighting; and the lands of the private owners that are within the national forest reserves will then be turned over by the State board to the National Forest Service, and we are going to ask the lumbermen to pay what it costs to protect that land.

Mr. KINCHELOE. Well, why do you need any of this appropriation here? Why do you not go ahead and do that?

Mr. DANAHER. We are going to try to do that. What we are doing at present out there, and what we did last year, was to cooperate with the Forestry Service. The lumbermen did it. Over 70 per cent of them cooperated and paid all of the costs of looking after that, but there is a lot of no-man's land in there,

a lot of land that has been cut over. It belongs to different people that will not pay any fire protection. They will not protect their own land. If you force them to do that, they let it go back for taxes.

Mr. KINCHELOE. I understand. Then, at your next meeting, you mean to propose to turn the forests of the individuals over to the State forestry service of California, and then if this bill becomes a law, the State forestry service will turn it over to the Federal Government and let Uncle Sam protect your property?

Mr. DANAHER. Yes, sir; help protect the cut-over lands for the benefit of the public.

Mr. KINCHELOE. Yes; you want your lands protected by the Federal Government, but you are not going to give the timber away, are you?

Mr. DANAHER. No, sir; we are not going to give it away.

Mr. KINCHELOE. You do not think that you would get any benefit out of it?

Mr. DANAHER. Yes, sir; we would get benefit out of it and we are willing to pay for the benefit that we get out of it. But the main purpose, the main benefit that is going to come out of the protection of the new forest grown is to the public.

Mr. KINCHELOE. There is going to be a pecuniary benefit to you gentlemen.

Mr. DANAHER. But we can not afford, under the present circumstances, to go that far in protecting the timber for the future. Now, without help a great deal of this property, a great deal of this land, is going to go back to the State and counties for taxes.

Mr. JONES. Let me ask you a question. Did you not say a while ago that your companies, or the companies belonging to your association, cut last year about 750,000,000 out of the 950,000,000 feet of timber?

Mr. DANAHER. Yes, sir; approximately that much.

Mr. JONES. Now, the companies cutting the other 200,000,000 feet are not members of your association, are they?

Mr. DANAHER. No, sir.

Mr. JONES. Well, is there anyone here representing them?

Mr. DANAHER. No, sir; I think the big majority of that stuff is represented by some fly-by-night 257 mills, which cut in the neighborhood of 150,000,000 feet a year.

Mr. JONES. Have they an organization?

Mr. DANAHER. They are little mills not organized. They are the little fly-by-night mills, three men in a mill, that will cut a board and then when they get it cut carry it over to some other place. They are mills that cut three or four hundred thousand feet a season up to three or four million feet. They are not organized. Nobody represents them. They are doing nothing in the way of fire prevention. They are the worse menace for fires we have out there, because you can not get them to do anything. They may have 40 acres, or they may have 160 acres, and when they get through they are through. They do not have any money. There is no way of getting at them, because they will let the land go back to the State.

Mr. JONES. You say they will let the land go back to the State?

Mr. DANAHER. Yes, sir.

Mr. JONES. The land that they own?

Mr. DANAHER. The land is not valuable. They will either let it go back to the State, or sometimes if there is enough of it in that neighborhood to make a success for grazing; they can sell it for grazing purposes after it is cut over.

Mr. JONES. If the land goes back to the State, and the State or National Government is going to regrow it, the State will be better off if it went back to the State?

Mr. DANAHER. Yes, sir.

Mr. JONES. Then, you will not have a Government appropriation for the money to develop the land being held by private owners?

Mr. DANAHER. Well, I can not say that. If you want timber, enough timber in this country to satisfy the needs of the country in the future, or what is estimated to be enough to meet its needs, it will have to be protected, and the public is going to be the beneficiary because they will then be getting cheaper building material than they would otherwise.

Mr. JONES. I understand that, but if the present owners allow the land to go back to the State—the land is practically valueless as it stands as cut-over land?

Mr. DANAHER. Yes, sir; it is of very little value.

Mr. JONES. Then, if the Government is going to spend money to rehabilitate that land and make forests of it again, and the public does not have that land, what benefit is the public going to get for land that they do not own?

Mr. DANAHER. They will have the land.

Mr. JONES. No; where it belongs to your company and the companies of your association.

Mr. DANAHER. Where it belongs to our company, the acreage we have, we have got to sell it for grazing purposes to the cattlemen and the sheepmen.

Mr. JONES. You mean lease it for grazing?

Mr. DANAHER. No; I mean sell it.

Mr. JONES. Sell the fee outright?

Mr. DANAHER. Yes, sir. We can not pay the taxes on it, because when you put that stuff to grazing it is practically gone so far as ever raising any timber—that is, cut-over land—because the sheepmen and cattlemen believe in burning it off as much as they can to get range.

Mr. JONES. Right there, you mean to say that your members that belong to your association are not holding any cut-over land, and that they are making disposition of it as soon as possible; is that it?

Mr. DANAHER. No, sir; they are practically all holding their cut-over land, with the exception of a few.

Mr. JONES. With the hope that the Government will spend money in making a forest of it?

Mr. DANAHER. Not altogether, but with the hope that the Government will help us carry the burden, or that the Government will buy our land for forestry purposes for what we can get out of it for grazing purposes.

Mr. JONES. Well, has there been any organized offer of that land to the Government for the price that it can be sold for grazing purposes?

Mr. DANAHER. I do not know. I do not think there has.

Mr. TEN EYCK. What is the value of that land when sold for grazing purposes?

Mr. DANAHER. It is sold for from \$1.50 to \$3.50.

Mr. JONES. Well, if it brings that for grazing purposes, why is it, if it is not worth anything for timber to you, so far as your companies are concerned, why have not your companies disposed of it as cut-over timber?

Mr. DANAHER. You can not dispose of its that way.

Mr. JONES. Well, if that is the market price and it is worth that for grazing purposes it would seem that you could dispose of it, otherwise it would not be worth that.

Mr. DANAHER. Now, take companies like the Michigan-California Lumber Co., which I represent; all of the timber in their hands is within the boundaries of the El Dorado National Forest. It seems reasonable to us that eventually the Government will want that land to come into that forest.

Mr. JONES. Well, there are many instances where companies have traded this cut-over land to the Government for timber land, are there not?

Mr. DANAHER. On the basis of valuation per acre for cut-over land and per thousand value, stumpage value, or timber. In other words, if the Forest Service appraises cut-over land at \$2 an acre and asks \$3.50 a thousand for pine timber stumpage we give them an acre and a fraction and get 1,000 feet of pine timber.

Mr. JONES. Well the Government sells this pine timber that takes 50 to 100 years to grow for \$3.50 a thousand, and then you are going to expect them to build it up for you for nothing?

Mr. DANAHER. Timber grows just the same as any other crop, and ripens just as grain ripens, and then if you do not harvest your crop it deteriorates. There are in the mountains out there a great deal of timber too ripe now, and it would be better for cutting now because it is of more value to-day than it will be 50 or 100 years from now. You can not indefinitely hold timber any more than you can indefinitely hold your wheat in the field.

Mr. JONES. Then if the Government should take over the rebuilding of these forests then your companies will ultimately either lease this land for grazing purposes or dispose of it in fee or let it go back to the State for taxes?

Mr. DANAHER. Under the present taxes and economic conditions we would be obliged to do that.

Mr. JONES. And you would let it go back to the State?

Mr. DANAHER. Yes, sir.

Mr. JONES. Now these other individual owners you referred to, are they in favor of legislation of this character?

Mr. DANAHER. Why, I do not think so.

Mr. JONES. Then there is not a unanimous opinion in favor of this?

Mr. DANAHER. We have men in the industry and pretty big men who are not in favor of this legislation.

Mr. JONES. What reason do they give as their objection?

Mr. DANAHER. They give the reasons that were brought out by you that they do not want to take chances of putting their business under the control of some men sitting in Washington.

Mr. JONES. They are a little bit afraid that this man sitting in Washington is going to make regulations favorable to the big organized owners which will not be to their interests, are they not?

Mr. DANAHER. Possibly they are. Possibly they are afraid of just those things. I am talking not about the little men, but I am speaking of the big men in our organization who are afraid. They are afraid that regulation might be put out—

Mr. JONES (interposing). They are afraid that the regulation which the big interests would suggest and adopt would be ratified by the Government and that they will be of such a nature that they can not operate individually.

Mr. DANAHER. I think that you and I are talking at cross purposes. I am referring in this to the larger men in the industry, not the scattered little fellows—and there are many of them—but the larger men who are afraid of this new policy.

Now, with regard to the little men, I do not know what their idea is, particularly because they are not permanent. A man will go in and use a traction engine to furnish power for his mill and put in a little mill with a circular saw and he may cut out 40 acres, and then after he has done that he would be done as a lumberman.

Mr. McLAUGHLIN of Michigan. Those are the kind of mills that they refer to in Michigan as portables?

Mr. DANAHER. Portables; yes, sir; only they are bigger than the mills they use in Michigan and require more power.

These men will go in there and haul their lumber by wagon and truck, and so on and so forth, and they may be in the lumber business out there for a year or five years, or a longer time, then they go out of business.

Mr. JONES. These are the men you refer to that cut the 200,000,000 feet last year?

Mr. DANAHER. There are a lot of them. They have small plants, and they just cut the timber that they have. And they have timber enough that they are able to work sometimes for five years. The great majority of men there cutting 5,000,000 to 10,000,000 feet, I think, are working on Government timber.

Mr. JONES. Let us see if they are not afraid of this, that some regulations will be promulgated by the National Government, or the National Government in cooperation with the officials of your organizations, that will place such a burden of organization on them that they can not afford to do the organization work that the companies out there will require.

Mr. DANAHER. I do not know; but I do not believe that that is so, because I can not see what regulations we could put on for the timber industry out there that would affect these men during the time that they are working on their own timber.

Mr. JONES. Well, do not some of the little fellows cut prices pretty heavily sometimes when they get up against it?

Mr. DANAHER. Not sometimes. They generally sell their cut ahead to get financial assistance, and they sell at a certain lump price for their whole entire cut.

Mr. JONES. Well, they are not in a financial situation so that they can hold the lumber or the timber, and they must go ahead and sell it on the market for what they can get for it?

Mr. DANAHER. Whatever they can get or shut down, and their overhead when they are shut down is not so very great.

Mr. JONES. The tendency of these individual men is to reduce the price of lumber, is it not?

Mr. DANAHER. No, sir.

Mr. JONES. The tendency of their operation is to reduce the price of lumber. In other words, if these fellows were financially able to handle the situation and could tide the thing over, the industry could get its own prices, could it not?

Mr. DANAHER. Why, no; that hardly works out, because with the amount of lumber that they cut, it is hardly a drop in the bucket, as compared with the

amount that is sold out there now. They cut somewhere around 23 per cent of our production, and that, as I have said, is contracted for generally before it is cut, so that it is out of the market by the time the bigger man's production moves, by the time his is ready to sell.

Mr. JONES. I know; but it tends to furnish a supply and in that way affects the market. An additional supply affects the market, no matter when it is sold.

Mr. DANAHER. As the law of supply and demand works; yes. And because of the great supply the price might be a little lower, but it does not really affect the market so far as we are concerned to any great extent.

Mr. JONES. Well, now, if the Government should issue regulations covering the cutting and utilization of that timber, the channels in which it could be used and covering all the details of operation, it might be a good deal more difficult for an individual who is not well equipped financially to comply with all of those regulations than for the man who was.

Mr. DANAHER. Yes; that probably would be true.

Mr. JONES. Well, now, do these companies that make up your association issue a regular schedule of quotations of prices that they send out, price lists, printed price lists; or what means do they use in getting their prices to their customers?

Mr. DANAHER. Most of them send out price lists to their customers.

Mr. JONES. Printed price lists?

Mr. DANAHER. Printed; yes, sir.

Mr. McLAUGHLIN of Michigan. Did you say that your association sends them out, or are they sent out by the individual members of your association?

Mr. DANAHER. By the individual members.

Mr. TEN EYCK. I would like to ask you what your idea is, as to how you interpret this bill as regards the allotment or apportionment of the appropriations set forth in the bill to the various States?

Mr. DANAHER. I do not believe I get quite what you mean. How much money every State gets?

Mr. TEN EYCK. Yes; what is your idea with relation to that part of it?

Mr. DANAHER. Well, under that the State might get as much as the State expends.

Mr. TEN EYCK. As much as the State expends?

Mr. DANAHER. Yes, sir.

Mr. TEN EYCK. In other words, if California expended \$100,000,000, the Government would put up \$100,000,000 to match California's expenditure?

Mr. DANAHER. Well, there is nothing in the bill that makes it obligatory on the part of the Government that it put up that amount. It may put enough appropriation to match the State appropriation dollar for dollar, or may not.

Mr. TEN EYCK. My idea is this, that some influential man, leader, or a man with a national influence, might come here under this bill, and get an amount of money that was greater than any individual State provided.

Mr. DANAHER. No, sir; I believe that the way it is worked out now is that the allotments for the States for 1922 are based on the amount of money spent by them during 1921.

Mr. TEN EYCK. The way this bill is interpreted is what I am trying to find out. Under this bill how will you get your allotment for the State of California?

Mr. DANAHER. That would be my interpretation, and then the amount the Government has to spend would be prorated among the States. If the Government has a million to spend, and all of the States have spent \$10,000,000, each State would only get 10 per cent of the amount of money that they had spent.

Mr. TEN EYCK. In other words, I believe you stated before that California spent \$150,000 on her work for reforestation and fire prevention?

Mr. DANAHER. Yes, sir.

Mr. TEN EYCK. Now, under that plan she would get 10 per cent, and that is all that would be given her, which would allow her but \$15,000 under this bill, according to the expenditure for last year?

Mr. DANAHER. Yes, sir.

Mr. McLAUGHLIN of Michigan. At the same time the bill reads, Mr. Ten Eyck, that the amount shall not exceed the amount expended.

Mr. TEN EYCK. Well, I was just asking for his idea as to this to see what his interpretation of the bill is.

Mr. McLAUGHLIN of Michigan. That point is not open for interpretation. The Secretary might refuse to spend any money in a State.

Mr. TEN EYCK. That is just the idea. The Secretary, if he so desires, could discriminate against a State, could he not?

Mr. DANAHER. I guess he could.

Mr. TEN EYCK. Do you think that is fair to put that power into the hands of the Secretary of Agriculture that would permit him to discriminate against any one State in the Union, provided they were willing to live up to the rest of the regulations?

Mr. DANAHER. I do not think that the Secretary could discriminate against a State if the State fulfilled the requirements that are set forth.

The CHAIRMAN. Suppose that half of the States appropriate enough money to take up all of the appropriation. Half of the States would get all of the appropriation.

Mr. DANAHER. I do not understand it that way. The way it has worked is that if the States have complied with the laws the money is prorated to the State.

The CHAIRMAN. This bill does not provide for that appropriation. Appropriations are generally carried in other bills.

Mr. DANAHER. I am not familiar enough with that part of the bill to discuss it. We indorse the Snell bill. We indorse more particularly the cooperative features of the Snell bill.

Mr. TEN EYCK. You indorse the substance but not the detail of the bill?

Mr. DANAHER. Not necessarily the detail of this bill, though we accept it. This bill could probably be rewritten, making it clearer in some points. I do not know. I am not a lawyer, and I could not tell you anything about that. The lumbermen have indorsed the cooperative features, and by that we mean co-operation. We believe that we can get real cooperation under the terms of this bill. If we can not, and if it is going to be a one-man power, I do not believe that the lumber industry would have indorsed it; but we have worked so closely to the Forest Service, and we know from experience all through the West that cooperation is possible, that the Forest Service and the State forestry boards and officials will cooperate with the lumber industry, and it gives them a voice and listens to their counsel, that we are willing to take any chances that might come up in such a bill.

Whether it has just the right wording in different places, I do not know. I am going entirely on the principle of the thing.

Mr. TEN EYCK. Well, what we want to know is the amount, the maximum amount, the Government has got to spend annually and we want to know the amount each State is entitled to, so we may propose some way that it be properly distributed.

With our roads, we have a certain system of distribution. We cooperate with the States in the building of highways, but, of course, that is cooperating with the State in constructing its own property, as a highway is naturally the property of the Commonwealth and will come directly under the supervision of the State.

We are in this bill cooperating with the States in the fostering of private business, as it were, which is a little different.

Mr. DANAHER. Would you call the growing of timber a private business? We in the lumber business do not believe that it is a private business.

Mr. TEN EYCK. Would you call it a public utility?

Mr. DANAHER. We think something should be done for the benefit that will be derived in the future.

Mr. KINCHELOE. Do you want the Government to fix the price that you will get for your timber?

Mr. DANAHER. No, sir; we do not.

Mr. KINCHELOE. Well, if it is a public affair, why should not the Government fix the price?

Mr. DANAHER. We would say that the timber on hand at the present time owned by us is not public property.

Mr. KINCHELOE. I understood that you looked at it, you gentlemen did, as a public business.

Mr. DANAHER. If that is your understanding, you misunderstood me, because we want to clearly confine—

Mr. KINCHELOE (interposing). How do you feel personally with regard to the present regulations for the selling of timber off of the forest reserves? Would you be willing for the Government to fix the same rulings for the sale of your timber?

Mr. DANAHER. No, sir; I do not think I would, because I think there is some question among the foresters as to the advisability of some of those rules for the expenditure of \$15 or \$16—

Mr. KINCHELOE (interposing). The Secretary of Agriculture under this bill—if this bill becomes a law—will have the power to do that; will he not?

Mr. DANAHER. Yes; but under this bill he would be inclined to talk over and see the practical side and experiment and find out which was really the right way to do it.

Mr. KINCHELOE. Well, I am talking about the law. You are putting words of intention in the bill as to the Secretary of Agriculture. I am talking about this law, if it passes. He can regulate the sale of your timber just as if it were on a forest reserve and were public business. Why should you gentlemen get reforestation and fire-fighting protection. If the Government is going to regulate it that much, to the extent of protecting your property, why should not the Secretary of Agriculture put the same standard on yours as on Government timber?

Mr. DANAHER. We do not admit that we are a public utility. We are not asking for Government help or protection; we are perfectly willing to protect ourselves.

Mr. KINCHELOE. You do not think, then, that any of this money should be expended for helping fight fires and protecting your property?

Mr. DANAHER. Yes; we would be satisfied if we could secure assistance and cooperation in the fighting of fires.

Mr. KINCHELOE. Well, that is a different argument. I am talking about the law. You do not contemplate that any assistance will be necessary in this connection—well, let me ask this question, then I am through. Something was said about this bill comparing with the good roads bill yesterday at the hearing, standing on all fours with the good roads bill. I think the good roads bill stands on the statutes of the United States to-day first and foremost. Every dollar expended there is not for the benefit of any individual. Nobody personally receives any direct benefit of it except the fact that maybe it enhances the property contiguous to the roads, which is not in the purview of the bill; but to every State is apportioned so much of the Federal Government's money to build its roads, based on population, based on mileage of roads, etc. Now, every State in the Union, every taxpayer in the Union is a direct beneficiary under this good roads bill, because each State is set out and each amount is equitably distributed, and the Federal Government puts up dollar for dollar with the State.

Every man, woman, and child in the Republic is a direct beneficiary of the good roads' bill.

Now, take this bill: I do not know whether or not—I am not acquainted in the State of Kansas—but take the State of Kansas, and it may be that there is no national forest in Kansas, yet the people there are going to have to contribute their proportion of this Federal money to be expended not only for the forestry reservation in California, but expended on your private property from which they receive no benefit in the world, except, perhaps, the next generation will have an opportunity to buy some lumber.

Mr. DANAHER. That is correct.

Mr. KINCHELOE. I do not think it is parallel at all to the good roads' bill. Now, we want national conservation, but here you have admitted that your State did practically nothing, you have admitted that the private owners of the property have not been protecting the trees, you have admitted that the public sentiment in California is so strong that you can not get an adequate appropriation from the State legislature and yet you come here to ask it of the Federal Government, and the taxpayers of Kansas, to contribute money not only for the reforestation of the forests of California, but as a direct beneficiary, as a private individual, but as a direct beneficiary you think it is parallel to the good roads' bill.

Mr. DANAHER. May I ask a question? How do you figure that private individuals are direct beneficiaries of this money expended for forest protection?

Mr. KINCHELOE. I will answer your question. You gentlemen, if you did not think that you were going to be benefited by the Federal money appropriated under this bill that you were not going to be benefited by the appropriation of the State of California to reforest this cut-over land, you would not be here advocating this bill. You expect to get some benefit, do you not?

Mr. DANAHER. We expect to get some. We expect great benefits. Also, we expect to pay for the benefit that we get. We are willing to pay our share, abso-

lutely. We are willing to pay more than our share, but we think that the big benefit that reforesting is going to be is to the future and the future people and not—

Mr. KINCHELOE (interposing). I realize that it is a big question, and that it is our duty to take care of posterity; but the point I am making is that it was said yesterday that this stood four-square with the good roads bill. I do not think there is any comparison at all.

Mr. DANAHER. Well, the good roads bill does help the property along the road, the private property, and it helps immensely.

Mr. KINCHELOE. It helps in that connection; yes.

Mr. DANAHER. And there is no assessment particularly against that property for that road. Those States are assessed to pay for the roads. Now, this one will immensely help the lumber industry, and we expect to pay a fair proportion of the cost.

Mr. KINCHELOE. Another thing, every man, woman, and child benefits from the good roads. They get to drive over those roads without it costing them a dollar for the benefit of driving over them. This timber bill will benefit you and other individuals, and I do not believe you will have to pay for it, but I do not believe that it is right to tax the taxpayers of other States for the purpose of reforesting your forests. They will have to pay the taxes, and perhaps there will be no reason except the forest reserve in other States would be directly benefited and the private owners of this property, owning millions of acres of land, would be directly benefited.

Mr. DANAHER. The taxpayers in Kansas would be benefited by having an adequate timber supply.

Mr. KINCHELOE. Kansas would have an opportunity to buy some timber from you.

Mr. CLARKE. Just a moment, Mr. Kincheloe. Of course, when we get down to taxing the people of one State for the benefit of those of another, when you get down to it, the State of New York, for instance, pays over 30 per cent of every Federal dollar appropriated. Now, do not all of the States get the benefit of that money?

Mr. KINCHELOE. Of the roads, absolutely. That is what I am talking about.

Mr. CLARKE. But we contribute nearly a third of the entire amount appropriated by the Federal Government to your State or to any other State which is now being appropriated by Congress.

We are spending more money for good roads in New York than we are spending elsewhere, because we have more people up there, and we pay more taxes because we have more people to make roads for.

Mr. KINCHELOE. The point I am making is that it was stated that this bill stood on all fours with the good roads bill. I think it does not, because the good roads are used by every man, woman, and child in the country. They all benefit from it.

Mr. CLARKE. Well, then, let us go a step farther forward and go ahead with this forward movement looking to progress. We must look to to-morrow and to to-morrow's morrow. The people of Kansas will derive directly benefits from this reforestation program. They will have cheaper lumber if we increase the acreage of timber that is grown in the country, and all of the people in Kansas will derive benefits from this.

Mr. KINCHELOE. In a way, they will have an opportunity to buy some lumber, provided they have the money to pay for it.

Mr. Ten Eyck. There is no doubt about reforestation being a good thing, and the proper utilization of the forests being a good thing, and protecting the forests being a good thing; but I want to ascertain, and I can not get the information from the bill, or from my interpretation of the bill, how we are going to allot this money to the various States from a fair and just standpoint?

Mr. SNELL. Mr. Chairman, I could bring witnesses here to testify to that, and to answer those questions.

Mr. TEN EYCK. As Mr. Clarke said, New York State is spending or paying 25 to 30 per cent of everything that is appropriated by Congress. Then in addition to that New York State in the past has spent a tremendous amount of money for reforestation, and for fire prevention, which in a way has been a benefit to Kansas and these other States. We have done that single handed and alone. Now, I want to know, before we spend another big lot of money, how much that is going to amount to.

Mr. TINCHER. The State of Kansas has been brought into this. As I understand, the Agricultural Committee is confronted with a proposition of passing a law carrying out a program of reforestation and conservation, and as a representative of the whole Government, as well as Kansas, I shall endeavor to try to prevent too much personality in that law. I do not want anybody misled by New York. After they get our money, the money our people send up there, they pay it into the Treasury. They simply take our money and pay it into the Treasury.

Mr. TEN EYCK. I just want to enlighten the gentleman from Kansas by saying that New York spends more money for grain raised in his State than any other State in the Union. That is where we pay our dollars.

(Whereupon the committee adjourned to meet at 1.30 p. m. of the same day.)

AFTER RECESS.

The committee reassembled at 1.30 o'clock p. m., pursuant to recess.

The CHAIRMAN. The committee will come to order.

Mr. SNELL. I do not know whether the committee wants to ask Mr. Danaher any more questions at the present time or not.

The CHAIRMAN. I would like to ask him one or two questions.

I understood you to say that the protection of the forests against fires was most important?

STATEMENT OF MR. R. E. DANAHER—Continued.

Mr. DANAHER. Yes, sir.

The CHAIRMAN. Can you approximate the cost of absolute protection against fire? What do you suggest can be done in addition to what has been done?

Mr. DANAHER. You can only extend your protection by putting on more rangers to discover fires, a sufficient number of men to suppress the fires when they are discovered, and through an educational campaign to educate the public—the campers and hunters and fishermen—to the dangers of leaving their camp fires burning.

The CHAIRMAN. Where the forest is sparsely settled there is no one there to educate—that is, not very many.

Mr. DANAHER. The forests are sparsely settled; but it is not the inhabitants that live in the forests that start the fires; it is the campers and people going through.

The CHAIRMAN. You have the roads and trails, whether they are settled or not.

Mr. DANAHER. Yes; we have a good many roads and trails. Most of the country is a pretty good hunting and fishing country, and during the fishing and hunting season we have a great many hunters and fishermen up there; then in a good deal of the forest area in the Western States the tourists are going through. There are a great many automobile roads through the country.

The CHAIRMAN. How many of the fires are started by them?

Mr. DANAHER. A good many, though not all of them. A good many of the fires start from the operations of lumbermen, where the fire gets away from them, but most of the fires that get away and do considerable damage are fires that are started off away from lumbering operations and are not discovered in time or they may be discovered and there may be only one man there.

The CHAIRMAN. Could you approximate the cost of that protection?

Mr. DANAHER. That would be very hard to do; but in California under the Federal Forest Service it is costing us about 1.6 cents an acre for fire suppression at the present time.

The CHAIRMAN. Have you been able to suppress them?

Mr. DANAHER. To a great extent. We could do better, I think, with more money; but up North, in some other parts where is fire menace is a great deal heavier, it is costing 5 or 6 cents and sometimes as high as 10 cents an acre per year.

The CHAIRMAN. You are now spending about \$4,000,000 a year above the receipts—that is, after turning over all the timber and the grazing fees and water power and all other fees connected with the forests—on top of that you put in about \$4,000,000. Now, the question is how much more would be required?

Mr. DANAHER. I could not answer that question. Mr. Greeley or some of the forest men could answer that, but I could not answer it intelligently. I do not know how much forest area they have to protect and it is entirely a matter of conjecture with me.

The CHAIRMAN. You are familiar with the operations of the Forest Service in the fighting of fires?

Mr. DANAHER. I am fairly well familiar in my own particular district.

The CHAIRMAN. It occurred to me that you might be able to approximate the cost?

Mr. DANAHER. I would not feel capable of giving an answer that would be of any value, Mr. Chairman.

The CHAIRMAN. After all, if we go into this we ought to have some estimate.

Mr. DANAHER. Well, I think the Forest Service would be the best one to give you estimates of what that would cost. Some of the gentlemen that will follow me in their testimony are in these forest protective associations doing that and they know what it cost them. I think up in Idaho and some places—I am not certain of this—that it has cost them as high as 10 cents an acre per year.

The CHAIRMAN. Yes; but you see the question is now what plan can we adopt that will be practical and successful? It seems as though we are not protecting all the forests with the \$4,000,000 we spend.

Mr. DANAHER. You are trying, I think, to protect too much area with too little money. I do not know how much more would be necessary.

The CHAIRMAN. How much more do you think it is going to take?

Mr. DANAHER. I suppose that it would take in the neighborhood altogether, to protect the timber that you want to protect, \$9,000,000 or \$10,000,000 a year.

The CHAIRMAN. Would that afford protection?

Mr. DANAHER. I think it would.

The CHAIRMAN. Would \$100,000,000 do it?

Mr. DANAHER. Oh, yes.

The CHAIRMAN. Well, let us find out about it; let us find out how much it will take.

Mr. DANAHER. That is a question that I think you would have to look into and study and make estimates upon. That is something that I tried to bring out this morning, the necessity of studying this question before you formulate any plan.

The CHAIRMAN. I feel certain that the Forest Service is doing everything that can be done and is doing its very best, but it is a big proposition and we have to deal with it and how are we going to deal with it? I am not criticizing the Forest Service; I think they are doing the very best that can be done, but you can not expect one man to take care of several townships of land. Some of them are spread over probably 20 or 30 miles of territory, and they can not take care of all that. Now, the question is, How many men will be required? What men we have are doing most excellent work; how much more is required?

Mr. DANAHER. I do not feel capable of answering that question. I could only give you a very wild guess, and I do not like to make wild guesses, because I do not know how much would be required for the entire country. In California I would say this, that I think to protect all the forest lands in California we will have to spend twice as much—at least twice as much money as we have spent. Now, that would not mean that the Forest Service would have to spend twice as much money, but that the State and the private individuals and the Forest Service would have to cooperate in handling this entire problem and spend at least twice as much money as they have been spending.

Mr. McLAUGHLIN of Michigan. Have you seen any of the work of patrolling the forests by airplane?

Mr. DANAHER. Yes, sir.

Mr. McLAUGHLIN of Michigan. How much of that has been done and what do you think of it?

Mr. DANAHER. I think that that is one of the best patrols we have.

Mr. McLAUGHLIN of Michigan. How much of it is done?

Mr. DANAHER. Well, not very much. A couple of forests in California are patrolled by airplane, and I believe there is one patrol or so in Oregon. Mr. Allen could probably give you some information on that.

Mr. McLAUGHLIN of Michigan. How is it done?

Mr. DANAHER. By sending these airplanes out with an observer to fly over the forest and make a round trip every day. With a map of the forest they are able to locate the fire and wireless back to the base the location of this fire.

Mr. McLAUGHLIN of Michigan. They communicate by wireless?

Mr. DANAHER. They communicate by wireless to their base, to the airplane base, and then it is telephoned to the Forest Service.

Mr. McLAUGHLIN of Michigan. Is it done at all by carrier pigeon?

Mr. DANAHER. Not that I know of.

The CHAIRMAN. I believe you suggested the reforestation of land. Have you given any thought to that? Have you made a study of it, so that you can give us an estimate of the cost of that work?

Mr. DANAHER. The forest experiment stations?

The CHAIRMAN. No; replanting trees, growing trees.

Mr. DANAHER. No; I could not give you an estimate of that. I have never thought in our part of the country that that was a feasible way of reforesting. I believe it is feasible in the thickly settled populous districts, but I do not believe that under present conditions planting trees is a feasible way of reforesting western forests or western cut-over lands. You can accomplish the same results by natural growth. It will take a little longer, but the expense, I think, of planting would be prohibitive.

Mr. McLAUGHLIN of Michigan. How large an area can an airplane cover and do it right?

Mr. DANAHER. Well, I am not familiar with that either. That would be a wild guess. I think that the one over the El Dorado forest is about 300 miles.

Mr. McLAUGHLIN of Michigan. Three hundred miles what?

Mr. DANAHER. Their daily patrol circle.

Mr. McLAUGHLIN of Michigan. Do you know how the expense of that would compare with the other method of protection?

Mr. DANAHER. That is an auxiliary patrol. That would not take the place of the lookouts or anything like that, because there are certain conditions under which airplane patrol can not locate the fires.

The CHAIRMAN. There are no landings in many places in the forest, are there—at least not many of them?

Mr. DANAHER. No; very few.

The CHAIRMAN. And you could not find a landing or make one in there?

Mr. DANAHER. In some parts of the country you possibly could; in our country you could not. It is standing on end too much. There is not enough level space.

Mr. KINCHELOE. You spoke this morning about the high taxes in California. What is the State tax on land out there, do you know?

Mr. DANAHER. In some places it is in the neighborhood of 3 per cent of the valuation. I think the valuation is around 50 to 60 per cent.

Mr. KINCHELOE. I mean the tax rate. How much is it on \$100 worth of property?

Mr. DANAHER. Well, that varies in every county.

Mr. KINCHELOE. I am not talking about the individual county rate. What is the State rate?

Mr. DANAHER. I do not know.

Mr. KINCHELOE. Of course your counties vary.

Mr. DANAHER. I do not know that. I have always looked at the tax rate as the entire rate that we pay.

Mr. KINCHELOE. Do you know how high those counties run out there?

Mr. DANAHER. Some of them are up to 3.8.

Mr. KINCHELOE. What do you mean, \$3.80 on \$100?

Mr. DANAHER. Yes, sir.

Mr. KINCHELOE. Is that the county rate?

Mr. DANAHER. County and State. That is the total tax.

The CHAIRMAN. Is that on the full valuation?

Mr. DANAHER. No; that is on about a 50 per cent valuation.

The CHAIRMAN. Is that your law, 50 per cent?

Mr. DANAHER. No; I do not think there is any law on that.

Mr. TEN EYCK. Is it agricultural, city, or village property that you are talking about the high rate?

Mr. DANAHER. That is agricultural, a timber county with a national forest in it that takes up a big area of taxable lands, and so the rest is taxed at a higher rate to raise the money.

The CHAIRMAN. Did you say 28 mills?

Mr. DANAHER. Thirty-eight mills.

Mr. McLAUGHLIN of Michigan. Something has been said here about the distribution of the Federal money so that each State might be assured as large an amount of Federal money as it itself appropriates and uses. Can you think of any plan by which that class of work can be done and appropriations made on that basis? The road law was spoken of. That law provides for the distribution of Federal money on a certain basis. The total area of the State is taken into consideration; the number of miles of road over which rural mail is carried is taken into consideration, and the total population of the State. Those are the three factors that determine the amount of money that a State shall have. Of course the amount arrived at is the proportion of the amount allotted for the entire country, or provided for the entire country.

Under the Lever Act—which provides for the farm education extension work, if you are not familiar with the law by name—it is provided that the appropriation is to be distributed on the basis of rural population of a State; that means the population of the State outside of cities of more than 2,500 population. Those are reasonable bases—it seemed so to the Congress—and I guess now we could not devise any better method of distribution; but that is for work that is general, absolutely general, and more or less uniform throughout the country. Here is a work that should be done in some States and in other States should not be done at all; in some States there would be more work to be done than in other States; and it seems to me that if this work, this whole question, is of national interest, the question of timber supply might be just as important to a State in which there was no timber and no forest land, no opportunity for spending money along this line, and the need would be as great and the interest would be as great as in the State from which the timber would come. After thinking of it you might think of some basis on which the distribution of that money might be made; I can't think of any, except that it be put where it is needed, and that that be left to the judgment of the Secretary of Agriculture.

Mr. DANAHER. I think that would be the most logical way to appropriate enough to take care of it. Our appropriations out there in my State are biennial, and it would seem to me that the amount necessary to be appropriated by Congress could be determined and based on the amount appropriated and used in the States during the preceding two years.

Mr. McLAUGHLIN of Michigan. I can not think how we could frame a law in such a way as to give assurance to a State like New York, that has lots of money—of course, they pay lots of taxes, but we all pay tribute to New York—I do not see how we could frame any law that would insure New York getting as much money as it might itself wish to appropriate and spend.

Mr. DANAHER. I do not understand the bill to mean that it is absolutely necessary to match dollar for dollar with the States.

Mr. McLAUGHLIN of Michigan. No; the law says that the amount given to a State shall not exceed the amount that the State provides. It may be nothing, but it can not go above the amount that the State provides.

Mr. DANAHER. The amount appropriated by Congress to be used in cooperation with States should be apportioned amongst the States as their proportion is to the total amount used by all States.

Mr. McLAUGHLIN of Michigan. Then the work might not be done where it is most needed and would produce the best results.

Mr. DANAHER. Well, I think that that is again a matter of education, and as we progressed we would find that the States that needed this work done would appropriate and furnish the money.

Mr. McLAUGHLIN of Michigan. It is a matter of education, so far as getting information is concerned; but as a matter of fact, after all, some States would need work done more than others, and results might be better in some States than in others. That is hardly a question of education, except as you give the definition of that word and make it mean the getting of information as to where the money is needed and could be best spent. I did not know but that you had some idea as to the method of distribution. I have not.

Mr. DANAHER. No; I have not.

Mr. McLAUGHLIN of Michigan. No method occurs to me by which it can be done at all on the basis of the distribution of the road money or the agricultural extension money.

Mr. DANAHER. I have no suggestions to make.

Mr. TEN EYCK. Right along that line the gentleman did not quite understand me. He only understood part of my question to you. It is not only to assure

each State of getting its proper proportionate amount that it needs, but it is to insure any State, not necessarily the State of New York, the States of Pennsylvania or Connecticut and Rhode Island, which are thickly populated from being called upon to pay a large amount through taxes to take care of an unreasonable amount of reforestation, due to the fact that there is practically no limit to the subdivision. Suppose the Secretary of Agriculture came from a State—of course this is a hypothetical way of putting it—and he decided that that State should get practically all the money, if the State was willing to put up their proportionate share, what protection would the other States of the Union have under this bill?

Mr. DANAHER. I am not familiar enough with the terms of that bill to state

Mr. TEN EYCK. I do not say that this bill does not cover it; I merely want to know how it is covered.

Mr. DANAHER. I am not particularly familiar with the terms of the bill. I is the policies embodied in the bill that I was trying to testify upon.

Mr. TEN EYCK. Your idea, as I understand it, is that you believe that the reforestation and protection against fire loss and things of that sort is really the crux of the bill? Is that your idea?

Mr. DANAHER. I believe the big feature in the bill is the cooperative feature

Mr. TEN EYCK. For that purpose?

Mr. DANAHER. Yes; for the purpose of establishing a permanent forest policy

Mr. TEN EYCK. In the bill I notice that there is \$1,000,000, if I understand it right, for that purpose, and there is \$3,000,000 for investigation, another \$1,000,000 for seeding, and \$50,000,000 for the protection of watersheds. Are these amounts proportioned properly as to the different classes of work; if so how should these amounts be divided between the various States under the policy that is being established in this bill?

Mr. DANAHER. No; not permanently. That is just a start.

Mr. TEN EYCK. This is merely a start?

Mr. DANAHER. Just a start; yes, sir. If I may make just one statement it probably clear up some of my answers on questions this morning, the lumber industry feels the need of a permanent timber policy and think it should be based on education and knowledge. In order to get that they are willing to cooperate and are willing to accept even a certain amount of Government control. Now, do not understand us as coming here and begging Congress to establish such control. We have been told that there is a big public demand for this and we as citizens want to do our share, but we are not—at least the California lumbermen are not—begging Congress to do any such thing, if it is the opinion of Congress that is not the thing to do.

Mr. KINCHELOE. You do not think there is much demand for this in California, do you?

Mr. DANAHER. California has the timber. I say it is a matter of education out there. There will be a demand for it in time. This question of forestation and conservation is practically a new one in the entire country.

Mr. KINCHELOE. Well, I say, at present there is not much demand in California for it.

Mr. DANAHER. Not much demand for it; no.

Mr. KINCHELOE. You could get bigger appropriations from the State legislature, could you not, if there was much demand for it in California?

Mr. DANAHER. Yes; and we will get a bigger appropriation.

Mr. KINCHELOE. I say you could already have gotten bigger appropriations if there had been much demand?

Mr. DANAHER. Yes.

Mr. McLAUGHLIN of Michigan. Mr. Kincheloe asked some questions this morning in regard to the benefit that would accrue to the private owners of timberlands from this supervision and assistance, if you may call it that, of the Federal Government and from the State, and that would be a private benefit that you would reap all together, accounting, therefore, for your advocacy of this bill. I would like your opinion as to the net benefit in money from such supervision and assistance, taking into consideration the fact that the Secretary of Agriculture is authorized to impose restrictions and regulations, some of which might forbid you to cut all your timber; some of which might require you to lumber in such a way as to make it very expensive—in a way to require you to clean up after you got through, involving considerable expense. Some of the gentlemen with whom I have talked say that regulations might be imposed—and they fear they are threatened with such regulations—which would make lumbering so expensive that they could not afford to own timber, could

not afford to lumber it at all. Now, I am not expressing an opinion on that; I have some idea of it; I have lived in a lumber country all my life—you know what western and northern Michigan was many years ago—but taking into consideration the burdens that will be, and possibly may be, imposed upon you, what would you think of the question of whether or not the net profit in money would be very large to the lumberman, assuming that there would be some advantage accruing to you at once or in the long run from this Federal supervision and protection, and so on?

Mr. DANAHER. I do not think there would be any net profit. I think there would be a loss to the lumber industry. I think it is going to cost us, if this policy is put into effect, more than it does now; that the benefits that accrue to us will be comparatively slight. For that reason, as a lumber man, I do not want the cost of the requirements for timber cutting and everything all assessed to lumbermen, but want them assessed as the benefits fall. We believe that this timber policy is going to benefit the people as a whole, and that as the public is benefited it should pay. We think that there is a question of education again—educating the public to their financial responsibility in this matter. If they want timber in the future—and they will want it—we believe it is their place to pay the greater cost of growing that timber.

Mr. McLAUGHLIN of Michigan. Do you find that there are many people—a very large part of the people—who believe as they did in Michigan some years ago, that the timber supply is inexhaustible?

Mr. DANAHER. I think there are few very of them who believe that, but the big majority do not think of the question at all; and if they do, they draw their ideas from a good many magazine articles that have libeled, I think, the lumber industry and have alleged it to be wasteful. They take their ideas from that and say, "If we can only do something to the lumber industry, then we will have settled this timber question." I think it is a matter of education to get that idea out of the heads of the public.

Mr. McLAUGHLIN of Michigan. Another thing that I wish to ask you is this: I was wondering to what extent the unfortunate practice of letting the land go back to the State for taxes prevails in your State. I say, "unfortunate," because we know by experience that that was done in Michigan many years ago. There was a time when only the best timber was marketed and it was profitable to cut only the best timber, and the owners of the land did take the best; they took it off and left the rest, and the land went back to the State for taxes still with a lot of good timber on it and a wonderful foundation for a forest. That land went back and was sold for taxes; the State passed it into the hands of others; a little later some of that timber had grown, the market changed and some of that timber was profitable to cut off and it was taken off and then the land went back to the State again for sale. The State seemed to be insistent that everything that grew should be at once, or ultimately, removed from that land, which was a very unfortunate condition of affairs. We know by experience what it has done for Michigan, and I was wondering to what extent that situation prevails in the country in the West with which you are familiar.

Mr. DANAHER. Very little. It is only the small operators, as I said this morning, the fellows with 160 acres or 200 acres of land that when they cut out the timber and are through with it are letting their lands go back for taxes.

Mr. McLAUGHLIN of Michigan. Now, does the State of California know enough to keep that land, having cost them nothing?

Mr. DANAHER. Yes; they are keeping that land, because principally, I think, up to the present time there has not been any other market for it and they could not sell it. It has not been put into State forests yet. We are working on that; that State Board of Forestry in California is trying to bring that about, that all cut-over timber lands that revert to the State for taxes shall be immediately placed under the supervision of the State Board of Forestry and permanently set aside as a part of the State forest.

Mr. McLAUGHLIN of Michigan. Do you not think that sentiment ought to be developed?

Mr. DANAHER. We are trying to develop it, but again it is a matter of education to convince somebody who thinks there is plenty of lumber and who hasn't seen any lumber shortage in the State that possibly there may be some day.

Mr. KINCHELOE. In answer to Mr. McLaughlin's question awhile ago you stated that you thought in the operation of this bill, instead of benefiting the

private owners it would cost them more. If that is true, then, of course, the price of lumber to the consumer would increase, because you would naturally pass it on to him, would you not?

Mr. McLAUGHLIN of Michigan. The profits would be less.

Mr. DANAHER. That does not necessarily follow. We have not at all times been able to pass on to the consumer all extra costs.

Mr. KINCHELOE. It does not necessarily follow but I do not know of many businesses where it does not follow. The point I am making is that if it is going to cost you more it is going to cost the consumer of lumber more for his lumber by reason of the enactment of this law.

Mr. DANAHER. The cost can be made prohibitive unless reason is used in that bill.

Mr. KINCHELOE. You further said a while ago that in your opinion the crux of this bill was the cooperation that it would bring about. You further stated in answer to my question this morning that you would not want to submit to the rules of the Secretary of Agriculture if he were to impose the same rules on the private individual in cutting timber that they do now on the Government forests. Now, if he were to impose that on you, which he would have a right to do under this bill, and it would not suit you gentlemen, then there would not be much cooperation on the part of private owners with the Government in the administration of this law, would there?

Mr. DANAHER. On the supposition that the Secretary of Agriculture would not use any reason in establishing his requirements, we would not cooperate.

Mr. KINCHELOE. Well, I say if he did do it and it did not suit you gentlemen—which you say it would not if he imposed the same rules on you that he does on the buyers of the Government timber—you say that would not suit the private owners—then if it did not there would not be much cooperation under this bill on the part of the private owners with the Federal Government, would there?

Mr. DANAHER. No, sir; but I just want to call your attention to the fact that the buyers of Government timber are not paying the costs of the requirements on the part of the Government now. The Government is losing it in the price of the stumpage.

Mr. KINCHELOE. Of course, I take it the purpose of the Government in establishing those rules is that they think it results in preservation of the forests.

Mr. DANAHER. They think it is a preservation of the forests, absolutely.

Mr. KINCHELOE. Then, as a natural result would not the Secretary of Agriculture, if he wanted to be absolutely fair impose the same rules on you gentlemen for the preservation of the forests that he would impose on the purchasers of Government timber?

Mr. DANAHER. And ask us to stand all the costs? If that is for the preservation of the forests it is for the benefit of the public, and the public should stand part of that extra cost.

Mr. KINCHELOE. And your idea is that if he should put it on the Government should pay it, so far as the private owners are concerned?

Mr. DANAHER. I did not get you.

Mr. KINCHELOE. Your idea is that if the Secretary of Agriculture does impose the same rules upon you gentlemen as he does upon the purchasers of Government timber, whatever extra cost it may put you gentlemen to the Government should pay?

Mr. DANAHER. Part of it.

Mr. KINCHELOE. So you want to be the beneficiary and play both ends against the middle in this bill, being the beneficiary of this appropriation, at the same time the Government standing any loss that you gentlemen may be put to by reason of complying with the regulations?

Mr. DANAHER. We are going on the supposition that the Secretary of Agriculture is a reasonable man; that he has intelligence enough to know that the same forest regulations can not at this time be applied, or should not at this time to be applied, to privately owned land as are to publicly owned land. The public is paying the entire cost right now of your forestry regulations in losing that much in the price of the timber they are selling. Now, there is no reasonable expectation of assessing private individuals with that cost by putting those same requirements on private lands. That would be class legislation, would it not?

Mr. KINCHELOE. If the same motive actuates the Secretary of Agriculture in preserving the forests of the Government that would actuate him in preserving your forests, if you are going to take it in the national aspect, why

should not you gentlemen have the same rules and regulations as applied to timber cut off the Government reservation?

Mr. DANAHER. If the forests are being preserved for the public in the one case and being preserved for the public in the other, why should not the public pay the bill in both cases?

Mr. KINCHELOE. I am talking about the regulations. I think the Government will pay it.

Mr. DANAHER. That is what I am talking about, the regulations.

Mr. KINCHELOE. I think the consumer of timber will pay it all. I do not think you gentlemen will.

Mr. TEN EYCK. Is it not a fact that you are opening the door to Federal control when you ask the Government to spend money for you in reforesting your lands, reseeding them, fighting fires, and all those things, paying for that on private lands? Are you not opening the door to the Government to come in and say, "On account of this money that we have expended we now have the right to treat you the same as we do our own Federal Government lands?"

Mr. DANAHER. We are not asking the Government to protect timber on private lands except for the benefit of the public. We understood that there was a demand for it. We believe that it is going to be necessary eventually to do this, but we are not begging that this thing be put into effect.

Mr. TEN EYCK. I am not assuming that you are; neither am I asking these questions to rebut or favor th's bill; I am merely trying to bring out here the real purport of the bill and what is the best thing to do in relation to the bill for the benefit of the people and for the benefit of the country at large; and if you say that it would be a bad policy for the Government to do this and yet through the very enactment of the bill it will give the Government the opportunity to do what you do not want, it may be bad for the present holders of timberlands in the United States.

Mr. DANAHER. That is the chance that we are willing to take in order to co-operate and do what we think should eventually be done to establish a timber policy.

Mr. TEN EYCK. Now when you say "we," whom do you mean?

Mr. DANAHER. The lumber industry of California.

Mr. TEN EYCK. You stated here before that there were a number of lumber men that did not agree with you.

Mr. DANAHER. There are a good many out there that do not agree. The majority voice does agree, and through our association we have a majority voice, and we have indorsed the principles of the Snell bill.

Mr. TEN EYCK. Is that a majority of 70 per cent?

Mr. DANAHER. Yes, sir.

The CHAIRMAN. I understood you to say that this was practically all for the interest or benefit of the public?

Mr. DANAHER. I did not get that.

The CHAIRMAN. I understood you to say that all of this is in the interest or for the benefit of the public?

Mr. DANAHER. You mean all of it?

The CHAIRMAN. These appropriations and this legislation and what would be accomplished under it.

Mr. DANAHER. It is going to relieve private industry of a certain amount of cost, and I think in relieving them of that, it will enable them to practice forestry.

The CHAIRMAN. I understood you to say—I hardly think you meant that—that it was largely, or practically all, for the benefit of the public.

Mr. DANAHER. I said the biggest proportion of this is for the benefit of the public, not all of it.

The CHAIRMAN. You spoke about a loss incurred by the lumber companies in complying with the Government rules for fire protection and that this was paid for by the Government.

Mr. McLAUGHLIN of Michigan. That is in the price received for the timber.

The CHAIRMAN. And that is deducted from the cost of the stumpage?

Mr. DANAHER. What I meant by that was that every man in our district who makes a bid on national forest timber knows that it is going to cost him approximately 50 cents a thousand to pile and burn brush, and knowing that, it is perfectly natural that he bid 50 cents a thousand less than he would bid if he did not have to pile and burn brush.

The CHAIRMAN. How does the price paid for stumpage to the Forest Service compare with that paid to the private individual?

Mr. DANAHER. As a rule, it is a little higher because there is no carrying charge on national forest timber; the operator pays for it as he cuts it; he pays no taxes and he takes no risk.

The CHAIRMAN. He pays more on the Government contract than he would on a private contract?

Mr. DANAHER. Not on a contract. He pays more buying timber from the Government per thousand feet than he would pay for private timber.

The CHAIRMAN. When he buys, he enters into a contract with the Government?

Mr. DANAHER. With the Government; yes. Now, I think that that same man, if he should enter into a contract for privately owned timber, would pay more for it; I am sure he would if he did not have to pile and burn brush on privately owned land. It is a cost of production that has to be deducted from the stumpage.

The CHAIRMAN. I understood you to say that the Government gets more out of it than the individual.

Mr. DANAHER. The Government gets more out of it on its contracts than the individual.

The CHAIRMAN. Per thousand feet?

Mr. DANAHER. Per thousand feet than the individual would on selling a block of timber, for somebody to hold and carry and pay taxes on and assume fire risk.

The CHAIRMAN. Supposing he buys the stumpage?

Mr. DANAHER. Then the Government does not get as much as the individual would.

The CHAIRMAN. How do the prices compare?

Mr. DANAHER. I would say that they were just about the difference in the cost of logging combined, or the cost of fire protection.

The CHAIRMAN. The average price paid the Government is \$2.60. Now, how much does the private individual get on an average?

Mr. DANAHER. That question can not be answered in that way, Mr. Haugen, because the average price of Government sales, as I understood Mr. Greelev yesterday, was based on all sales made on all forests and different kinds of timber.

The CHAIRMAN. Take, for instance, where it sells for \$3.12, what would the private individual get for that timber under the same conditions, the same quality of timber?

Mr. DANAHER. For the same quality of timber I think he would get around \$3.50. I am not sure. There is not a great deal of that done in our territory.

The CHAIRMAN. Then the price paid the Government is less than the individual's. Is that it?

Mr. DANAHER. I would say so.

The CHAIRMAN. Then you estimate that at about 50 cents?

Mr. DANAHER. Between 45 and 55 cents in our territory.

The CHAIRMAN. If it is an advantage, then, taking over a Government contract, is the Government getting all it is entitled to?

Mr. DANAHER. Yes; it is.

The CHAIRMAN. You say there is an advantage in buying from the Government—the Government is paid less.

Mr. McLAUGHLIN of Michigan. There is a difference in the original price, but the buyer has a lot of expense to incur.

The CHAIRMAN. We are dealing now with exactly the same place; the one is just as accessible as the other. I understood you to say that the Government gets \$3.12 and the individual gets \$3.50.

Mr. DANAHER. These are not detailed figures. I wanted you to understand me that there is approximately that difference, for the reason that when you buy Government timber you have to do certain things under regulations that would cost you the difference; that would bring the cost of that stumpage up.

The CHAIRMAN. But you have no taxes to pay. You said there was an advantage in buying from the Government.

Mr. DANAHER. You would have no taxes to pay, buying on a straight timber contract from the owner, on private timber—if I bought private timber from a private individual.

The CHAIRMAN. The Government, then, pays for the clearing of the land?

Mr. DANAHER. Certainly.

The CHAIRMAN. Are there any other questions? If not, we are very much obliged to you, Mr. Danaher.

Mr. SNELL. We will present next, Mr. Chairman, Mr. J. W. Toumey, dean of the Yale Forest School.

STATEMENT OF MR. J. W. TOUMEY, DEAN OF THE YALE FOREST SCHOOL.

Mr. TOUMEY. Mr. Chairman, as I see this problem—as I see this part of it that we have before us—there are two things that are to be considered. One is, What is the problem anyway? And the second is, To what extent will this bill which is now before us for consideration solve the problem?

It seems to me, gentlemen, that there is in the general consideration of forestry in this country one thing that stands out preeminently, and that is regrowth. Somehow and in some way this Nation has got to get regrowth, and it has got to get regrowth on a prodigious scale. I am not going to take the time here to go into the reasons for this. You know the condition of the forests of this country at the present time, and you know something of the consumption of timber, and you know what the outlook is under our present conditions for future supplies. If you do know that, you know as well as I do that we must get this regrowth. That is the problem.

The CHAIRMAN. Why must we have that regrowth? Let us get that cleared up. Is it because of the apparent shortage of timber?

Mr. TOUMEY. It is because of the constantly increasing evidence of shortage, which is going to be a prodigious shortage as soon as our virgin timber supplies are gone.

The CHAIRMAN. Then the only remedy is either to produce it or import it?

Mr. TOUMEY. Yes, sir.

The CHAIRMAN. The same rule applies to the beet sugar people. Would you extend that to the growth of sugar beets?

Mr. TOUMEY. No, sir.

The CHAIRMAN. There is a shortage of sugar at times.

Mr. TOUMEY. Yes; there is here; but when we come to the question of lumber, the world situation in lumber is such that we have very grave uncertainty as to getting it anywhere unless we grow it ourselves.

The CHAIRMAN. There is plenty of timber in other countries that can be got for the mere cutting of it.

Mr. TOUMEY. I am not so sure of that.

Mr. McLAUGHLIN of Michigan. Do you know what the importation of lumber is now?

Mr. TOUMEY. I can not tell you; but very little in this country, only what comes from Canada to-day, including pulp wood, as I remember the figures.

The CHAIRMAN. I was in Mexico a number of years ago, and they told me that you could buy lumber there for practically nothing—I think less than a few cents a thousand feet.

Mr. TOUMEY. Let me illustrate this: England has depended for generations upon getting her supply of timber from outside the country. She sees the situation as it is to-day, and what is evidently going to be a dearth of the kinds of timber she uses later on the world over, and she is putting enormous sums of money into reforestation to-day, looking out for the future.

The CHAIRMAN. I recall that story when we first took this matter up and the question of expense was discussed. The question was whether we would adopt the same policy as Europe and other countries, and that was not given any serious thought at that time because it is a very expensive policy. I have been trying to find out an estimate of the possible cost. I take it that, as stated by the gentleman who just preceded you, the question of growing timber is out of the question, and I am quite sure it is. One gentleman here estimates the cost at \$15, another \$30, and I am sure that you can not produce it in many instances for \$100 a thousand feet if you figure the investment, the interest on the investment, carrying charges, and taxes. I am certain that it can not be produced at \$100 a thousand in many localities.

Mr. TOUMEY. It may be in many localities.

The CHAIRMAN. It is a simple proposition and does not require any great mental process to ascertain the cost of producing timber.

Mr. TOUMEY. Do I understand from what you have stated that the policy should be to go ahead and use what we have left and let the future take care of itself?

The CHAIRMAN. Oh, no; I have not even suggested that. I know what we are up against. There is no question but what we are approaching here a shortage-

of timber, and it is worthy of most serious consideration, but the country is entitled to know what we are drifting into. We ought to be able to tell the Congress and tell the country at least what the cost is going to be. We ought to be able to tell within \$100,000 of its cost, if we are going into the production proposition.

Mr. TOUMÉY. It is my judgment that the country should know, as you state, the direction in which we are drifting. It is also my judgment that the country, because of that, should orient itself into shaping our forest heritage so as to get as much regrowth as we can at reasonable cost. I do not believe it is germane to this question of just how many dollars we ought to put into regrowth, but to put as much as we can as the years go by, so that it will orient us into the right direction of ultimately increasing our timber supply.

The CHAIRMAN. The business man generally estimates the cost and the profit. Now, that may not be pertinent to this cost, but to me it appears that it should enter into it. It makes a whole lot of difference to my mind whether it is going to cost \$100 a thousand feet or \$15 or \$5. It occurs to me that you have given this matter a good deal of thought and attention, and you might be able to enlighten us on that subject. I have not been able to figure it out clearly in my own mind.

Mr. TOUMÉY. We will take the situation here in the East. I can give you specific illustrations.

The CHAIRMAN. Of the cost?

Mr. TOUMÉY. On our own forest at Keene, N. H., we have something like 1,000 acres of white pine. A thinning was made in a 45 to 47 year old stand two or three years ago, taking out about two-thirds of the stand and improving the stand for future growth, and that material brought \$200 an acre on the ground after it was cut out in the way of thinning.

Mr. McLAUGHLIN of Michigan. How long had it been standing?

Mr. TOUMÉY. About 47 years, or something like that.

The CHAIRMAN. Can you grow merchantable timber in 47 years?

Mr. TOUMÉY. You can grow white pine box boards that command a pretty good price in that length of time.

Here is another specific case: A man by the name of Ellis, at Keene, N. H., had been taking care of a second-growth stand of white pine for a number of years. He had carefully thinned it. He sold the timber on 22 acres for \$15,000.

Here is another case: A German in 1873 took a dishpan in the spring and gathered some trees in the fence corners, white pine. He planted them 8 by 8 feet apart on 3 acres of steep slope on a little farm that he owned, right next to our property. He died a few years ago. His property was sold and that 3 acres brought more than all the rest of his farm and sold for an even \$1,000 to a resident of Keene, N. H.

The CHAIRMAN. Sold for how much an acre?

Mr. TOUMÉY. For something over \$300 an acre.

The CHAIRMAN. What did that cost him?

Mr. TOUMÉY. It cost him somewhere between \$10 and \$12 an acre.

The CHAIRMAN. To produce it?

Mr. TOUMÉY. To plant it. That is all he ever did with it.

The CHAIRMAN. But there was the use of the land and the interest on the investment.

Mr. TOUMÉY. The land probably was worth \$2, or \$3, or \$4 an acre when he planted the trees, and it is not worth more than that now if the timber was cut off. It is absolute forest land.

The CHAIRMAN. Did you estimate the cost of cultivating it, or whatever has been done on it?

Mr. TOUMÉY. There was no cultivation. There were carrying charges and protection of it during the period of its growth.

The CHAIRMAN. And the taxes.

Mr. TOUMÉY. The taxes; yes; but it would be very difficult, it seems to me—and I think it is quite unnecessary—to try to sit down and in an elaborate way determine just what the cost would be, because this is the point: Every dollar we put into this proposition, the more we are going to get out of it in the way of regrowth, and we want to add to what regrowth we have to-day an enormous amount if we are going to have timber for our future needs. And there are some parts of the country where we can pay a great deal of attention to-day and put in a good deal of money in getting established stands of desirable species and know that there is a possibility of making it a reasonably attractive proposition. Now, that is the problem.

The question was asked in reference to this bill; how is this bill, if it is enacted into law, going to help to get this enormous amount of regrowth that we need? I have thought over this problem a good deal and it seems to me that with 137,000,000 acres of timber land in the West, a little scattered elsewhere that we have now, that has never been cut, is not the basic question that involves us in this question of future timber supply; it is the 245,000,000 acres that have been cut over and are now more or less indifferently clothed with timber, and the idle land that is absolutely waste, doing us no more good now than if it was in the middle of the Sahara Desert.

That is our problem, getting started in increasing the regrowth there and using the surplus timber that we have got to-day to tide us over until we can get some of this available for market.

Mr. TEN Eyck. I agree with you that reforestation is the policy that we ought to adopt, whether this bill is the right bill or some other one that will come along later is the correct thing. That is for the committee to decide, but there are several questions in relation to it that we ought to consider. One is do you believe that the Federal Government should take this step or do you think that it comes within the province of each individual State? I can appreciate the step that we are taking in relation to a bill of this kind, as the chairman has brought out, the beet-sugar industry, the cotton industry, and wheat people may come along and want the Government to give them free seeding and soil treatment so that they may produce more. Now, right along that line would you be in favor of the Federal Government, if that is your final decision as to where the work should start of reforesting thousands of acres in the various States of the Union—would you be in favor of permitting the owners of those lands later to cut them clean again and come back to the Government and ask them to reforest again?

Mr. TOUMAY. Not in the way that you put it. Let me explain that situation as I see it, how this bill, or some of the projects presented in the bill, can be of benefit in this problem of regrowth.

First of all, a forest crop, as you know probably, and as has been explained, is on a totally different basis than any other kind of a crop because of its long period of maturity. It is not as appealing to the private owner of land to grow forest crops, as it is to grow crops and harvest them the next year. The history of the civilized world has shown that and it has shown this, gentlemen, that whenever the problems of regrowth are left wholly to private initiative your forests go to pieces. That has been the history of the world everywhere. Therefore every nation—and we have got to do the same—has gradually worked into the attitude of mind of giving more and more attention, more assistance in one way or another, so as to make the adequate amount of regrowth possible on land that is held by private owners.

Mr. TEN Eyck. But right there, my State has done that through just this sort of thing that we are doing here, through education and through the legislature. Now it is a question in my mind, and I am open to suggestions, whether the other States of the Union ought not to do the same as we have done. That is one question that I would like to have you discuss.

Mr. TOUMAY. As I understand it, your State is not producing one-twentieth of its own timber needs to-day.

Mr. TEN Eyck. I appreciate that; but we are reforesting more than any other State, perhaps, in the Union.

Mr. TOUMAY. But the amount that your State is reforesting—a few thousand acres each year—is not a drop in the bucket.

Mr. TEN Eyck. I appreciate that; but if all the States did, in proportion, the same amount that we are doing, wouldn't the entire Union receive the same benefits that this bill will accomplish?

Mr. TOUMAY. I do not see it in that way, because I think the provisions of this bill will provide for many things that neither your State nor any other State is providing for to-day. Let me express it in this way right here: We have got right down to this problem, as I see it, the problem of regrowth on privately owned timber land. That is our problem in America to-day, if we are going to have a future timber supply. How are we going to get it? How is this bill going to help us?

First of all, it is my judgment that in every State the State has a decided problem, and what the Nation can do is secondary to what the State must do. Put it that way. The State must appreciate that it has forest districts within the State. Now, the timber-land owners in each of those districts, the timber users, and the State forest officials must get together, in my judgment, with

their feet under the same table and determine what is necessary to be done and what is going to be the cost of getting what may be termed acceptable regrowth in their districts.

The private owner then comes forward and says—and he very often can say—“Gentlemen, I alone can not do this; it is uneconomical; the conditions of the Nation are such that I can not undertake it”; and there are definite reasons for it. Furthermore, the public must appreciate that if that district does get its regrowth, it is a decided benefit to the public. Nobody can dispute that. It is a decided benefit to the whole public—to industry and to everything else identified with that part of the country. If it is, the public must appreciate its duty in the matter and it must cooperate, sitting there together with the owners of the property to find out to what extent the public must help; and the public can help through the State and through the Nation both. It can not be left wholly to the State; it can not be left wholly to the Nation; it can not be left wholly to the private owners. It is a cooperative thing that has got to be worked out in each district, and then it is the duty of the State to do its part and the Government to do its part in order to make this regrowth possible.

The CHAIRMAN. Do you think it is possible to encourage the private owners to do that?

Mr. TOUMNEY. I do, most decidedly.

The CHAIRMAN. Have you had any experience in that?

Mr. TOUMNEY. Take Connecticut as a specific illustration. I in the last six months have talked to a good many land owners in Connecticut and have raised the question of what the public can do to stimulate regrowth in Connecticut. Now, Connecticut—my State of Connecticut—is not concerned very much with virgin timber. It hasn't got any. It is mightily concerned with about 70 per cent of the State that is nonproductive or producing a very ragged growth of cull second-growth timber to-day. It is our job in that State to try to make that better regrowth and help supply the 83 per cent of our timber needs that we now obtain from outside the State, with nearly 70 per cent of our State in productive agriculture.

Now, there are two things that loom big in here. When you talk to the owner of property, he says, “Why should I start a forest; it may burn up?” The public's job in here, it seems to me, is to handle this question, in cooperation with the private owners, to bring forest property to the point of view of practically an insurable risk.

The CHAIRMAN. A small growth planted on a farm does not need any fire protection outside of the individual, the owner's.

Mr. TOUMNEY. You can not separate one little grove; you have got to have a policy for the whole State.

The CHAIRMAN. If you are going into the prairie States, then it would be on a small scale.

Mr. TOUMNEY. Undoubtedly; but you take my State, you have got to have a policy that covers the principle in the whole State covering this question of fire protection.

The CHAIRMAN. Now, we get our lumber from the coast. We pay, I think, over \$20 a thousand feet freight. Of course, if we can grow that lumber at home there would be a considerable saving in freight. If anything could be done to encourage those people to grow the timber, saw it, and sell it, there would be that advantage in it. Now, do you believe it is possible to encourage the people in the prairie States to grow their timber?

Mr. TOUMNEY. I do not believe in the prairie States, where the land is of great agricultural value, they ought to grow timber.

The CHAIRMAN. But if we do not, we do not get any benefit from it. We still pay the freight on the long haul.

Mr. TOUMNEY. You may get the benefit not many years hence of a difference between \$50 or \$60 a thousand and \$100 a thousand to every one of your citizens that imports lumber from outside the State. And, furthermore, what you in your State will pay for timber in the future is not going to be determined by the absence of timber in your State, but it is going to be fixed by the price of timber over in Washington and Oregon; and aside from the cost of freight, you are going to pay, so long as there is any timber left, just the same as those people over there, where there is an abundance of timber.

The CHAIRMAN. There would not be that much difference, of course.

Mr. TOUMNEY. No; but if we do not go to growing timber now—if you do not encourage the producing of regrowth now—you will be up against a pretty serious situation as time goes on.

The CHAIRMAN. Some years ago in Iowa the farmer was allowed \$100 an acre exemption to the extent of 5 acres on a grove of trees, \$500 exemption. The result was they planted groves everywhere, but the law was repealed, and since that very few trees have been planted. I believe something should be done to encourage them to plant these small groves, and if we continued it we would have lumber to sell instead of buying it. That kind of timber, softwood, grows very rapidly.

Mr. TOUMEX. These are matters of small import compared with the great, broad policy that this country must adopt that will take care of regrowth in the large.

The CHAIRMAN. I think we will agree that to start with we must first decide on a policy, and that policy should then be carried out; that is what I am trying to develop, to see what we are going to get out of it, and that is why I am anxious to have your opinion as to what the result might be in the prairie States.

Mr. TOUMEX. I think any encouragement that can be given to the growing of local supplies of timber ought to be given everywhere.

The CHAIRMAN. Is it possible to interest them in it? What is your opinion about that? You have probably given this more study than any member of the committee and we would like to have your opinion on it.

Mr. TOUMEX. The question of interesting people, private owners, in regrowth in the future, in my judgment, can not be measured by the conditions of the past. I believe, gentlemen, that to-day this country is seeing very clearly the situation.

You gentlemen state that you see the situation, the danger, because of the lack of regrowth, of an adequate future timber supply. I believe that we are to-day at the beginning of a new era, and I believe the attention of this Nation and of the States is going to be diverted more and more keenly to this great problem that we have here now than they have been at any time in the past, and the question is how are we going to bring it about and what laws are necessary, and will this bill which is before us help in the matter, isn't that it?

The CHAIRMAN. Yes.

Mr. TOUMEX. As I stated a moment ago, we have got to start this business with the private owners right where the timber is, and it has got to be started as a cooperative scheme in which the owners discuss it with the State officials and they come to an understanding. Now, if it is shown that regrowth can not be made possible in the way of protection, in the way of attaining reforestation without the public doing part of the work in the way of tax revision largely and fire protection, and in silvicultural assistance—not with cash or anything of that sort—I think it is the duty of the public to perform that function. Furthermore, I will go so far as this—and with this bill that is before us—I believe that if the public goes so far as to provide this protection, this tax adjustment and this silvicultural assistance and all of these matters, to the extent that makes it possible for the private owner to economically take hold of the proposition, then I see no reason why the State can not, if it so chooses, regulate and make it necessary for the private owners to get reproduction. But I do not believe, gentlemen, that the State can do anything of that sort until it makes it through cooperation and assistance economically practical for them to do it.

Mr. TEN EYCK. Right there, if the State or Government did help the individual, cooperate with him to reforest the land, would you be in favor of the State or Government then regulating the way that that lumber that was grown through the cooperation of the State should be cut?

Mr. TOUMEX. No.

Mr. TEN EYCK. In other words, you would permit them to cut it right down again to the stump and go through this entire procedure again of reforesting that piece of land?

Mr. TOUMEX. We are not going through it 50 years hence.

Mr. TEN EYCK. Well, we are going through it some time, aren't we?

Mr. TOUMEX. Yes.

Mr. TEN EYCK. Now, I want this question answered, because I think you know your business. What should be our policy at that time?

Mr. TOUMEX. Personally, I see no objections and I would favor, if the public are willing to make regrowth economically practical and possible for the private owner to put a mandatory regulation upon the later treatment of that forest. But that can not be done, gentlemen, until it is made an economic proposition, and I will say frankly that the chief objection—I favor this bill in many re-

spects, but I would like to see the first two paragraphs of it redrafted—I do not know just how—emphasizing in some way sort of a more water-tight guaranty on the part of the State if the Nation puts this much money into this scheme for regrowth. I think the features regarding research in this bill, the features regarding increasing our public forests and the planting on our public forests are admirable. This question of cooperation between the Nation, the States, and the private owners I am not so clear as to whether we have thought it out clear enough yet, and whether it is expressed just in the way it ought to be in this bill.

Mr. TEN EYCK. Another question right here. There seems to be two bills drafted into one here.

Mr. TOUMNEY. Two or three?

Mr. TEN EYCK. Well, it looked to me two. There is a watershed proposition in here that to my mind does not relate to reforestation. It appears to be an accumulation of land in watershed regions by the Federal Government, and about 50 times more is appropriated for that than there is in the first paragraph for reforestation.

Now, the \$3,000,000 for investigation is three times the amount of reforestation, and I think that is very, very essential. It would have been a wonderful thing if we had the information called for in section 3 or 4 before us when passing on the other sections of the bill. Of course, that is not possible, however, at the present time.

Mr. TOUMNEY. That call for \$50,000,000 is really a call for increasing our national forests, which I believe in most decidedly, and the reason that it refers to watershed protection is because there is where our forests, our natural forest land chiefly lies.

Mr. TEN EYCK. My idea in asking that question is that I am in favor of the conservation of our forests and am not opposed to the Government purchasing more of the forest lands of the country in any way you see fit which may be of benefit to the country at large.

Mr. TOUMNEY. You are opposed to it?

Mr. TEN EYCK. I am in favor of that, the same way as I was in favor of our State doing what we did in New York State, as regards buying large tracts of forest lands and treating them the way we feel they should be treated. The only question in my mind is whether or not it is a proper place to legislate for national forests when we are considering the bill, as I understand it, under a reforestation head.

Mr. TOUMNEY. Well, split it into two or three bills.

Here is another point. I think that all of us who appreciate the present situation with regard to regrowth are inclined to encourage any public ownership of forest property, either by the Nation, by the State or by lesser communities, which is a very common practice, you know, in the old countries of Europe; but that is not going to solve our problem and we must get this regrowth on our privately owned land, and this getting the regrowth on privately owned lands is first of all a State function, in my mind. It is a State function which must be supported, in my judgment, the way so many other things that are State functions are supported by the Nation, by the whole Nation, because the whole Nation is vitally concerned in the future timber supply for the whole country, and then bringing it down to the private owner of forest property, as I said, sitting together and working out what must be done, and then the public doing its duty in making regrowth possible beyond what the private owner can reasonably be asked to do. That is the only way you will get it. I do not believe a law enacted that would force the private owner to provide for regrowth would get anywhere in many places. You would not be able to put over effective regulations if it had to be done at great financial sacrifice by every individual all over the country. You have got to make it reasonable, just from the standpoint of economics and then I think that if you talk it over with him and they all agree to it you will carry them forward and we will ultimately grow into a way of looking at our timberland so that we will get regrowth on a constantly increasing scale over what we have at the present time.

The CHAIRMAN. Will this bill get us anywhere with the private owner?

Mr. TOUMNEY. I think it would get us a long way with the private owner.

The CHAIRMAN. I think we are agreed that unless we can do that we will not get anywhere.

Mr. TOUMNEY. It is the Nation's part in carrying through a constructive program which looks forward to giving us national resources of wood in the future.

The CHAIRMAN. Speaking of this appropriation for the purchase of land to protect the watersheds, I do not think they have bought an acre within a thou-

sand miles of us; they get farther away, so that, of course, does not help us, but it helps that particular community. Now, we can go over into Canada and import lumber and pay the duty and get it just as cheap or cheaper than we could out there, because the transportation is not any more, and there is only a small duty.

Mr. TOUMEX. I have looked into this question a great deal for a number of years and I think we make a great mistake in this country to-day, those of us who are rather free in the way we are looking at our own resources, by saying that when ours are gone we can go over to Canada or go somewhere else to get timber.

The CHAIRMAN. We will have to go to other countries. We go to Cuba for our sugar and we go to Europe for other things. We will have to go where we can get it and go where we can buy it cheaper. That is not it, though; we want to produce our own. I think you are on the right track. Certainly if you encourage these people in the localities to go into this business and grow the timber I think that is the proper solution of it. That saves the freight; that is the big item with us.

Mr. TOUMEX. But just one word in here now—I say, if we can go into communities and encourage those communities to grow the timber, but you can not encourage those communities to grow the timber in a thousand years if it can not be grown on a reasonable and economic basis.

The CHAIRMAN. Then, the question is largely educational and the encouragement financially comes later.

Mr. TOUMEX. That is the cooperation with your State and your Nation. That is what we are after.

The CHAIRMAN. Your policy would be to get out among the people and educate and discuss this matter and get them interested and then encourage it by some Federal aid?

Mr. TOUMEX. I would have every State divided into districts, just as Vermont is divided into 10 forest districts to-day. I would have those men get together in the districts, the timberland owners, the forest owners, and users of wood, and the foresters and the other State officials, and work out their problem for their communities.

The CHAIRMAN. As you would work out of Washington?

Mr. TOUMEX. Yes. And what help does that community want? What must we have in the way of cooperation with the State and with the Nation in order to carry this program forward? You can not begin at Washington, gentlemen, and impose it down on to the local community, you have got to work out your problem in the local community and carry it up and ask for the amount that is necessary to put it over. That is the direction that will have to take.

The CHAIRMAN. I believe the majority of the people in the West might go into this business with the proper encouragement and the proper education, but the question is, How can it be worked out, and what we are trying to find out is, what is the policy? What are we working up to? If we are going out here on the coast and just spend a few million dollars we don't get so much out of it under the present policy besides paying expenses. We pay to their school fund and pay for building roads and trails—as a result \$4,000,000 are taken out of the Federal Treasury. Now it is proposed to take another \$53,000,000, and then \$3,000,000 or \$4,000,000 each year. That is not going to get us where we want to get. How can we legislate for the whole country so that all may benefit by it? We are all agreed that there is a likelihood of some shortage of timber and we want to overcome that if we can.

Mr. TOUMEX. I agree with you that if a local community in your State or in any other State can take the problem in hand, the owners of the land and the State officials; if you can show the practicality of regrowth there and show to what extent these private owners can undertake it and how much in the way of possible tax remission and how much in the way of protection and possibly silvicultural assistance is needed on the part of the State going through to the Nation, very well, then a part of it should be yours.

The CHAIRMAN. Well, I take it you people have discussed the policies and what the policy should be, but very little has been said about the policy so far. I thought now probably it was about time to develop along that line, that we might know something of what the policy is going to be.

Mr. TOUMEX. I have tried to state right now and here what I should consider the policy, of starting with the unit below and going up through and getting the necessary assistance from the State and the Nation.

The CHAIRMAN. I am very much interested in your statement. I am very glad that you are developing that.

Mr. TOUMÉY. And I think that is the way it has got to be worked out. We can not impose it from above, down on the private owner, in my judgment; it has got to come up from below through cooperation.

The CHAIRMAN. Through cooperation and encouragement.

Mr. TOUMÉY. Yes; encouragement and assistance. And, gentlemen, I dislike to hear the statement that is often made that, "Oh, the United States, the public, is giving this to the private owners." I do not look at it in that way.

The CHAIRMAN. Well, make it a 50-50 proposition. Then we will dispose of that.

Mr. TOUMÉY. The public are performing their duty simply in making regrowth possible, and I started out by saying that regrowth is absolutely fundamentally essential; you can never get it in the world by depending upon private owners alone; it is a function that belongs to the private owners and the public; and if it is, they have both got to assume responsibility.

The CHAIRMAN. But you can not expect a farmer heavily in debt to set aside part of a farm for 100 or 150 years without any income. He can't do that without some encouragement along some lines.

Mr. TOUMÉY. If it is a farm that will grow wheat, I hope he will never put trees on it—or if it will grow corn.

The CHAIRMAN. That is the only kind of land we have out West.

Mr. TOUMÉY. You had better let some other section grow your trees.

The CHAIRMAN. But we have to pay this excessive freight.

Mr. TOUMÉY. You are unfortunate in having all your lands good agricultural lands. There are some other States that would like to trade some of their lands on their mountain tops for your agricultural land. But these things, these resources, have got to be adjusted to the whole country. It has got to be worked out to the best advantage of all.

Mr. McLAUGHLIN of Michigan. In how many States that you know of are there laws relating to taxes or lessening taxes on timberlands?

Mr. TOUMÉY. Some of the States are just developing laws of that kind.

Mr. McLAUGHLIN of Michigan. What do you mean, sentiment in favor of the enactment of such laws?

Mr. TOUMÉY. Yes; there is a sentiment, and it is continuing.

Mr. McLAUGHLIN of Michigan. Have any of the States such laws now, that you know of?

Mr. TOUMÉY. Yes; quite a number of the States have laws of that kind. I think Massachusetts and Connecticut have such a law.

Mr. McLAUGHLIN of Michigan. What is the law in that respect in your State?

Mr. TOUMÉY. It relieves from taxation growing timber for some years after the forest is fully started. But most of the laws that have been developed so far, in my judgment, have been so complex that the ordinary man has felt a little uncertain regarding entering into them; and I want to state one thing to show you how this matter of taxes may work in wrecking the whole idea of getting better regrowth.

We have up in southern New Hampshire, for instance, a pine lot of 40 acres with about 20 acres of pine on it, half-grown pine.

Mr. McLAUGHLIN of Michigan. That is your forestry school?

Mr. TOUMÉY. Yes, sir; our forestry school up there. And in the town of Keene they increased the taxes. The local assessor all over this country is a czar; he can determine whether you will have regrowth or whether you will not, absolutely anywhere. He can tax that right up to its full assessed value. He did it there. What did we do? We were forced to sell it. Why? Because what he taxed that each year we figured out was a little more than the value of the annual growth, and if you get taxation to the amount of what is equivalent or approximately equivalent to the annual growth each year, where is the owner going to get off at the end of the rotation? We were taxed \$4 an acre, and we paid taxes of \$4 an acre on some young pine that we had up there—\$80 tax—and there were about 20 acres of young pine on this area.

Mr. TEN Eyck. Will you tell us how the Federal Government can stop the States and the counties and towns from taxing that property?

Mr. TOUMÉY. No; the Nation can not, so far as I know, but I think if the State will match these appropriations which are made in this bill you are going to get a keen sense of responsibility growing in the States, and I haven't very much doubt in my own mind, the way things are trending to-day, that

10 or 15 years from now you are going to see forest property put on a different basis for taxation than it is to-day.

Mr. TEN EYCK. How does this bill cover that particular point in relation to the taxation of reforestation of lands in the various States that the Government assists in the work of reforestation?

Mr. TOUMÉY. It does not. I do not know how it can, and that is the reason I am bringing that up.

Mr. TEN EYCK. Doesn't that mean, then, that after the Government has reforested these lands the State and county can come in and tax them out of business?

Mr. TOUMÉY. I do not understand that the State is going to reforest these private lands. That is not the function, but the State is going to handle the question of protection and handle the question of certain silvicultural information in a way which is going to make it attractive for the private owner to reforest. I do not think that the State should put \$10 or \$15 an acre into reforesting a piece of idle land for a private owner and turn it over to him any say, "Now, there it is; take care of it."

Mr. TEN EYCK. Well, there is an appropriation here for seed; there is an appropriation here for seedlings; there is an appropriation here for cooperation and assistance with the State and the individual for reforestation and protection against fire; on the other hand there is nothing that would prevent the town or county from taxing that particular piece of reforestation out of business later.

Mr. TOUMÉY. That appropriation for seeds and for seedlings is for getting regrowth on the national forests, not on private forests.

Mr. TEN EYCK. Is it particularly stipulated so?

Mr. TOUMÉY. Yes; that is section 5. It is just for the national forests or public forests.

The CHAIRMAN. There would not be anything to prevent the forester entering into an agreement with the States that if they did reduce taxes in a certain degree they would receive the benefit of the act.

Mr. TOUMÉY. No; and I would like to see if it could be worked out—I do not know as it can be in a bill, even if it is not this exact wording—whereby the State that secures the advantages of this from the Nation—I would like to see the State in securing that realize its responsibility in protection and in tax adjustment and in silvicultural assistance.

Mr. TEN EYCK. Now, in section 1 it says the Secretary of Agriculture is authorized and directed, "in cooperation with appropriate officials of the various States or other suitable agencies, to recommend for each forest region of the United States the essential requirements in protecting timbered and cut-over lands from fire, in reforesting denuded lands, and, where and to the extent necessary, in the cutting and removing of timber crops by such methods as will promote continuous production of timber on lands chiefly suitable therefor."

Does that mean that we are going to help them in reforesting?

Mr. TOUMÉY. Well, gentlemen, I am sorry to say that the first two paragraphs in here—it is not easy for me to see into it with as great clarity as I do into the rest of it.

Mr. TEN EYCK. In that same section it says the National Government will come in and make rules and regulations as regards the cutting of the timber, does it not?

Mr. TOUMÉY. I think there is no question that if we pass a law of this sort and if we grant these advantages the public must have something to say regarding what the management of that property that receives those advantages shall be.

Mr. TEN EYCK. I suppose that would be the natural outcome.

Mr. TOUMÉY. Certainly.

Mr. TEN EYCK. The reason I have asked all these questions is that I have a vague idea of what all this means, and I am trying to find out what it really does mean, or whether this bill was just drafted for the \$50,000,000 to buy the lands in the watersheds or in the national parks and the reforestation is merely a side issue.

Mr. TOUMÉY. No; it is to stimulate the private owners to do something.

The CHAIRMAN. Do you think the people in the States will take kindly to any such legislation?

Mr. TOUMÉY. I do. I must say this, that I have talked with quite a good many men recently that seem to feel that it is this question of inadequate pro-

tection and the question of uncertainty of taxation—oftentimes the very uncertainty at the present time—and the lack of having adequate silvicultural information that deters them from going ahead now.

Mr. KINCHELOE. You do not think the private owners of this timber would relish this Government regulation about their cutting it, do you?

Mr. TOUMÉY. I think that a man who enters into a cooperation with the State with his feet under the same table with the executive officers, and they look at a thing and see how it can be carried through, if he accepts that idea of regulation I do not think he will object to it.

Mr. KINCHELOE. Well, the gentlemen that have appeared here, when you ask them whether they would want to submit to the same regulations that the Secretary of Agriculture makes for cutting the timber on Government land, they say very emphatically they would not.

Mr. TOUMÉY. Those regulations—it seems to me there isn't any set of regulations that can be made here that will apply to all parts of the country. That is the reason I say, gentlemen, that the owners, the users, and the technical men must sit down together for the locality, and if they come to an understanding and present that matter then to the Secretary of Agriculture I am pretty sure they will get together.

The CHAIRMAN. But are they going to accept it? That is the question.

Mr. TOUMÉY. I am optimistic enough from the way the situation is at the present time that there will be pretty general acceptance.

The CHAIRMAN. Generally speaking, throughout all the States.

Mr. TOUMÉY. I think it will be general, as much as we can do. It will be on the right road anyway, and I do not believe we can undertake anything which is going to give us an ideal, ironclad situation in a year or two, but what I want to see coming out of all this is a trend toward more regrowth.

Mr. TEN EYCK. Right there—I believe in what you stated as regards this terrible condition that we are approaching as to the devastation of our forests or the cutting of our forests in a way that future generations will suffer from. From your knowledge and study—and I know from your reputation that you have made a real special study of this subject—isn't there another place that the Government or the State might start off in regulating our present mode or practice of cutting lumber to-day? Will you explain what your study has been along that line?

Mr. TOUMÉY. When I speak of growth I do not refer simply to regrowth on lands that have already been cut over, but I also refer to regrowth following lumbering that is taking place now and will take place in the future, and the same general principles in attacking the problem apply there as they do in the other case. The land owners out in the West have got to get in, as they have already, as I understand, sitting round the table with the foresters, and come to an understanding as to what can be done.

Mr. TEN EYCK. In relation to cutting that which is already standing?

Mr. TOUMÉY. Certainly; and as to what can be done and to what extent the public must come in and assume its responsibility and possibly shaping that in certain ways so as to make regrowth certain. Now, the private owner does not feel oftentimes that in competition with other States, other places, he can do it. Now, that is the public stake when they sit around the table and come an understanding and say, "We will help in certain ways, in fire protection, possibly in taxation"—those are the important things that occur to me—"whereby we will help in getting this regrowth, but if we do this you have got to get your regrowth."

Mr. TEN EYCK. Just a moment ago you were explaining how, through proper cutting of timber of certain forest lands, the land was worth more in a very few years on account of the increase in the valuation of the timber that was left standing.

Mr. TOUMÉY. That might be in some cases, but as a matter of fact the thing that impresses me in all this discussion is that you can not put down, in my judgment, any sort of a general regulation, but each State, each part of a State, each district, is a problem in itself. That has got to be, to a large measure, talked over and handled as to what can be done and as to what is the public's responsibility in making regrowth possible there to-day.

Mr. TEN EYCK. I have often said that it is very hard to legislate nationally in the same bill on a similar matter for people in southern California and at the same time for people in Maine.

Mr. TOUMÉY. So that, in this bill, so far as certain features are concerned you have got to make your appropriation, and you have got to leave it to the

Secretary of Agriculture, and I think it is a good thing, because I have confidence, gentlemen, that if an organization in Washington or Oregon, or Connecticut, if you please, of landowners, technical men, etc., all agree that that is the thing to do, that it ought to be done; that the Secretary of Agriculture is not going to have a wholly different plan of his own; that he is not going to impose upon the people there.

Now, in this connection let me state that I was speaking to one of the members of the British Reforestation Commission not long ago? Now, what do they do? What is their method? Do they fix regulations for each locality as to what shall be done? No. They say to the district, "You send us a plan. You tell us what can be done and to what extent it is necessary for the public to assist in carrying out this project."

Mr. TEN EYCK. Is that merely in the British Isles or in England?

Mr. TOURMEY. No; that is in England.

Mr. TEN EYCK. That is about the size of our State of Texas?

Mr. TOURMEY. Yes; that is about the size, but still it illustrates the point.

The CHAIRMAN. If there are no further questions we will hear the next witness.

Mr. SNELL. I will call upon Mr. Henry C. Campbell, chairman of the Wisconsin Forestry Association.

STATEMENT OF MR. HENRY C. CAMPBELL, CHAIRMAN OF THE WISCONSIN FORESTRY ASSOCIATION.

Mr. CAMPBELL. Mr. Chairman and gentlemen of the committee, I would like to recite very briefly the history of Wisconsin with respect to her forests, because it is very illuminating. Wisconsin was originally one of the great white pine or Norway pine forest States of the country, and we thought, or rather our fathers and grandfathers thought, that the supply was inexhaustible. There is not in Wisconsin to-day more than one or two considerable forests of pine. There is only one forest of any respectable size that I know of, and that is small in size, with the result that Wisconsin, a forest State naturally, originally endowed by nature with forests, is now importing at very great expense much of the raw material that she needs for her wood-using industries and for other purposes. We are spending several million dollars for freight charges alone, and yet Wisconsin is capable of producing all the timber that she requires and supplying the market.

For instance, I am strongly convinced that a majority of the copies of the newspapers printed in Wisconsin in any one day are printed on paper that is made outside of the State, or that is manufactured in Wisconsin largely from pulp wood and pulp that is imported from other States. We have just recently awakened to the gravity of the situation. We realize that we should have done it 30 or 40 years ago. Some of us have been studying the question and we have turned toward other countries for information and for guidance, and we find that almost every civilized country in the world, certainly the chief civilized countries, are producing timber through reforestation, providing as much as possible for their own needs, and we find that they are doing it, for one reason, because it is necessary, and for another reason, because it pays. I think I can say very safely that forestry pays in all the different countries where it is practiced, and has been paying in some of them, yielding dividends, for a hundred years in some cases. We know now that we have been criminally negligent with one of our great resources; that there are several millions of acres in Wisconsin lying idle and unproductive, simply because we did not have the foresight and vision that Carl Schurz showed in 1876, for example, when he was Secretary of the Interior, and sounded a warning against just exactly what has come to pass, not only in Wisconsin but in nearly all the rest of this country, and is coming to pass in nearly every section of this country.

Mr. TEN EYCK. Would you mind telling us what Wisconsin is doing now?

Mr. CAMPBELL. Yes, sir. Wisconsin is not doing much, but there is a movement on in Wisconsin that I think will be very successful.

Mr. KINCHELOE. How much does your legislature appropriate annually for forestry purposes?

Mr. CAMPBELL. It is a peculiar situation in Wisconsin. We have a State conservation commission and the forests of Wisconsin are under the jurisdiction of that commission. The income of that commission is not derived from taxation but from a number of various sources outside of taxation. For instance, hunting license funds, nonresident fishing license funds, commercial

fishermen's licenses, trappers' licenses, and the like. We had a very unfortunate experience in Wisconsin. An amendment to the constitution, adopted some 10 or 12 years ago, was knocked out because of lack of care in the passage of it. The forest lands are mostly idle now. There is not much being done. There is something in the way of fire protection, of course. There is something in the way of nursery work. There have been some small plantings but not anything large in size.

Mr. KINCHELOE. What was that amendment to your constitution?

Mr. CAMPBELL. It was an amendment that authorized forestry, and there was raised a very technical legal question and the thing failed in court; it was knocked out in court; the whole forestry program was knocked out in court.

Mr. TEN EYCK. How long ago was that?

Mr. CAMPBELL. That was about eight or nine years ago.

Mr. TEN EYCK. Have they ever tried to reenact it?

Mr. CAMPBELL. I was coming to that point now. The movement has been very much retarded during the intermediate period, and it was not sufficient to arouse interest until very recently. At the last session of the legislature, held less than a year ago, we brought about an initial passage of an amendment to the constitution. That will have to go through the next legislature and then be submitted to popular vote. In my mind, there is no doubt whatever that we are going to have that amendment to the constitution. At the present time, let me say, forestry is held by the supreme court to be a work of internal improvement, which is prohibited by the constitution.

Mr. TEN EYCK. What is the total amount of that revenue which goes to forestry purposes annually from hunting and fishing licenses?

Mr. CAMPBELL. It is something like \$300,000.

Mr. TEN EYCK. You have in your university a school of agriculture. Have you a school of forestry?

Mr. CAMPBELL. We have nothing of that kind in forestry. We have a very fine school of agriculture, but there is no school of forestry.

Mr. TEN EYCK. Wisconsin has been very busy, neglecting her forests, but competing with New York supremacy in the dairy business?

Mr. CAMPBELL. We have marched past New York State in the dairy business in the last year, and we rather hope to march past her in forestry.

Now, I want to say that we have a forestry nursery; we have forestry headquarters camps and several forest ranges, and in a very limited way we are trying to protect the State holdings, which amount to something like 300,000 acres in all. At the last session of the legislature there was enacted a law similar to the Michigan law, under which the State may acquire land for non-payment of taxes, and there was also a very liberal law enacted for the creation of community forests for villages, cities, and towns, but that was done a comparatively few months ago.

Now, those of us who have studied the situation, I think, agree in the main that it is a very great problem, that it should have been met 30 years ago, that it can not be deferred much longer without real distress to the country. We believe, or most of us believe, that the Nation for itself must get busy, and the State for itself must get busy, and that the Nation and the State, acting together, must get busy in the way of cooperation. I believe myself that the chief hope of a future timber supply in this country lies in national and State leadership. In time I believe we are going to have reforestation of privately owned lands, but I think that will take some time to inaugurate on a scale that comes anywhere near meeting the necessities of the situation, and in the meantime I believe the Nation should do all the forestry work it can and enlarge its forest reserves and reforest by hand, when necessary, depending as much as possible, of course, on natural reproduction.

May I state—and I am going to be quite brief—that we agree with all who have studied this question that the greatest need now, the thing upon which everything else must depend, is adequate protection of our forests against fire. This is necessary to protect timber that is standing. It is necessary to protect the young stuff that is growing. It is necessary to allow new growths to germinate, and it is necessary, too, we find, for the sake of the soil itself, because in Wisconsin, where there are millions of acres of cut-over land idle and unproductive, there has been great damage to the soil itself by the fires sweeping over the land, frequently with the result that the humus in the soil, for example, has been destroyed. We believe, too, that adequate fire protection is necessary as an absolute prerequisite to the planting of trees, that it is folly to plant young seedlings unless there is in operation a system that will adequately

protect them from destruction. We believe in the enlargement of the natural forest reserves. We believe in the reforesting of such lands as can not reforest themselves.

Let me say here that while I have known nothing from personal contact with the national forests, I do know that in northern Wisconsin there are tracts of thousands of acres that can not possibly be reforested in a natural way, that are incapable of natural reproduction, because they have been cut over and then burned over so frequently that there is no seeding tree within seeding distance. In that case, either through seeding by hand, which some advocate, or planting trees as they do in other countries, we have got to reforest those lands. We believe in a study of these question. We wish to have practical work begun on as large a scale as possible as soon as possible, but we believe, of course, that there must be at least, along with the work, cooperation. We know enough to do the work, and we believe, through research, that we can do it. We believe in cooperation between the Nation and the States, because that will be very helpful, indeed. If the Nation, by an example of leadership, planting where necessary and permitting a natural reproduction where it is possible to do so, providing for adequate fire protection, will set an example, it is an example that will be followed quite readily by many of the States, and we would welcome such help in Wisconsin. We really need that help in Wisconsin, and we regard timber and its products as the greatest necessity of life, next to food, drink, and clothing. We do not want our country, we do not want our State timberless, as China has been, and subject to all the evils that have resulted in China, the one nation which has neglected its forests all through the centuries.

Mr. KINCHELOE. You stated that your State owned 300,000 acres of that land?

Mr. CAMPBELL. Yes, sir.

Mr. KINCHELOE. How was that land acquired, by taking it over for taxes?

Mr. CAMPBELL. No; that was before this particular bill was passed that I mentioned. That bill was enacted only within a year or so.

Mr. KINCHELOE. Was it purchased by the State for the purpose of reforestation?

Mr. CAMPBELL. Some of it consists of the school lands, and large tracts of it were purchased by the State outright for forestry purposes.

Mr. KINCHELOE. Has any of it any timber on it now that is of any account?

Mr. CAMPBELL. Some of it has timber on it, but there is very little pine.

Mr. KINCHELOE. Has that timber been cut off since the State owned it?

Mr. CAMPBELL. No; it has been protected and it is growing. The only thing is that the dead and down timber is removed and marketed.

Mr. KINCHELOE. Was the virgin timber cut off before the State acquired it?

Mr. CAMPBELL. Almost entirely, to a very great extent, so far as pine was concerned, but there is timber of other varieties, not so marketable as pine, which remained on some of the land. The proportion of forested land in the State reserves is quite small.

Mr. KINCHELOE. The State is preserving that timber on that land; the State is not cutting it?

Mr. CAMPBELL. No, sir; it is not cutting it. It is simply guarding it against fire, and it has been guarded fairly successfully with a small force, and with really inadequate means.

Mr. KINCHELOE. You say that land is not suitable for agriculture?

Mr. CAMPBELL. Some of this land that the State bought, it bought in large tracts, and some of it is suitable for agriculture, but the larger part of it is not. We simply take the stand in Wisconsin that the agricultural land should be devoted to farming, and we want all our nonagricultural land that is capable of growing timber devoted to growing timber.

Mr. KINCHELOE. Why is it not suitable for agriculture? Is it on account of having no soil or on account of climatic conditions?

Mr. CAMPBELL. To some extent, at one point in the State it is climatic conditions primarily. The season is very short, I believe something like 200 days, as I remember it, but that is not the case so far as any great territory is concerned. The chief reason is that a great deal of the soil, especially northern Wisconsin and in one or two sections of what you might call middle Wisconsin, is very light sandy soil that will grow timber but will not permit of successful farming.

Mr. TEN EYCK. Is there any national forest in Wisconsin?

Mr. CAMPBELL. No, sir; but the State owns something like 300,000 acres of land.

Mr. TEN EYCK. Then you are not very much interested in this item of \$50,000,000 in this bill for additional national forests?

Mr. CAMPBELL. Except in this way, that I believe that to the largest extent possible the Nation as well as the State should acquire cut-over land that is not suitable for agriculture and reforest that land. I believe that the greatest progress that we can make for many years will fall far short of our necessities within a period of 50 years at the most, and that no time should be lost in carrying out this program just as extensively and comprehensively as possible.

Mr. TEN EYCK. Do you think it would be a good idea for the Government to buy some of your cut-over land in Wisconsin and establish a national forest up there?

Mr. CAMPBELL. No; I would not urge that. I am not sure that I would be in favor of that, so far as Wisconsin is concerned, but in other parts of the country the situation is very much different, in my opinion, and the Nation should increase its national forest reserves. I believe the Nation should acquire tracts of land not only at the heads but along the navigable streams, and anywhere else where the Nation can operate to the best advantage. In Wisconsin, I think, with perhaps some cooperation from the Nation, we can build up forest reserves and take care of them and earn the profits from them.

Mr. McLAUGHLIN of Michigan. In this particular part of Wisconsin that you are speaking of, is there not a great deal of land delinquent for taxes?

Mr. CAMPBELL. Yes, sir.

Mr. McLAUGHLIN of Michigan. Are they doing anything to get it back on the tax rolls?

Mr. CAMPBELL. We have a bill, passed less than a year ago, which enables the State to acquire the title to that land, paying the county the amount of the taxes plus interest and necessary costs, with the idea of getting tracts of that land, and in time blocking out forest reserves in that way, getting the land as cheaply as possible. That is the idea of that bill.

Mr. McLAUGHLIN of Michigan. That bill was passed at the last session?

Mr. CAMPBELL. Yes, sir.

Mr. McLAUGHLIN of Michigan. And in the future when lands are delinquent, I suppose that course will be pursued?

Mr. CAMPBELL. That is the authority that has been granted, and I assume it will be acted on. There are some of us who will do what we can to encourage action upon it.

Mr. McLAUGHLIN. It will result, however, in the State getting scattered pieces of land of no great size?

Mr. CAMPBELL. Yes; for a number of years, and yet not so scattered as one might think, because a good deal of this land will be land with a light sandy soil, worthless for agricultural purposes, which lies right near areas of forest land, not forested land, but forest land that the State now owns.

The CHAIRMAN. You say the pine is nearly exhausted in Wisconsin?

Mr. CAMPBELL. Yes; there is only one small tract.

The CHAIRMAN. There is considerable hardwood?

Mr. CAMPBELL. Yes; there is considerable hardwood now, but that is fast disappearing too.

The CHAIRMAN. You are encouraging agriculture on agricultural lands?

Mr. CAMPBELL. Yes; we are all encouraging that to the utmost extent, with the idea of putting the farmers on the agricultural lands and putting trees on the nonagricultural lands, to make all of our soil productive.

The CHAIRMAN. Do you think there is any encouragement now being given to private reforestation?

Mr. CAMPBELL. Personally, I do not have very much hope of that, so far as the immediate future is concerned. Forestry is quite a new thing in this country, and while it is done by private owners in other countries, private owners will have to learn a great deal before they engage in it, and besides that, the State will have to encourage it by doing away with annual taxes.

The CHAIRMAN. Do you think this bill if enacted into law would encourage it?

Mr. CAMPBELL. Yes, sir. I think this bill contains all the chief essentials needed for a national forestry system and for cooperation with the States.

The CHAIRMAN. You are not cooperating with the Forest Service now?

Mr. CAMPBELL. To a limited extent. I think we get a little allowance each year for nursery work. I think our nursery work is largely carried on through Federal aid. I think it is about \$2,500 or \$3,000 a year.

The CHAIRMAN. How does that work out? Is it satisfactory?

Mr. CAMPBELL. Yes, sir. There are some very fine plantations of Norway and Scotch and white pine up there that have been planted from State forestry nurseries.

The CHAIRMAN. You plant and replant them and distribute the trees?

Mr. CAMPBELL. They have been doing that. They have transplanted two-year-olds and I believe they make it a practice of planting three-year-olds.

The CHAIRMAN. What is being done in the way of fire protection?

Mr. CAMPBELL. Very little.

The CHAIRMAN. Is anything being done by the Federal Government or is it all done by the State?

Mr. CAMPBELL. The Federal Government is assisting some in the way of providing pecuniary aid, to a small extent, I believe, up to within a year. I believe Col. Greeley, who is here, can bear me out, and I think we received \$25,000 this last year for fire protection.

The CHAIRMAN. What is that \$300,000 you spoke of awhile ago used for, from license funds, etc.? Is it used for fire protection?

Mr. CAMPBELL. No; that is used for the propagation, planting, and protection of fish, for the protection of game, for the care of State parks, and for a number of other purposes. A very small proportion of it is devoted to forestry. The amount that is spent for forestry is more for maintenance than for development.

Mr. KINCHELOE. Then, that \$300,000 is not spent for forestry purposes?

Mr. CAMPBELL. No; nor should it be.

Mr. KINCHELOE. I asked you how much the legislature appropriated, and you said they appropriated nothing on account of the constitutional inhibition, and then I understood you to say that this fund was used for forestry purposes.

Mr. CAMPBELL. Then I failed to make myself clear. I have just done so in my statement to the chairman. The income is devoted to a number of purposes, the largest item being for the maintenance of some seven or eight or nine fish hatcheries and the payment of fish and game wardens. That is a great item—over half of the entire amount goes for those purposes.

The CHAIRMAN. In your opinion, what might be looked forward to under this bill in Wisconsin?

Mr. CAMPBELL. Under this bill, as I see it—

The CHAIRMAN. You are the forestry chairman of the State?

Mr. CAMPBELL. No, sir. I am just the chairman of the Wisconsin Forestry Association, which is an association of citizens.

Mr. McLAUGHLIN of Michigan. That is, you are not a public official of the State?

Mr. CAMPBELL. Oh, no.

Mr. McLAUGHLIN of Michigan. You represent a private volunteer organization?

Mr. CAMPBELL. Yes, sir.

The CHAIRMAN. In your opinion, what would be the effect on the policy and practice of Wisconsin if this bill were passed?

Mr. CAMPBELL. If this bill were passed, it would help us very much in the State for the acquisition of land, for the reforestation of land that the State now owns and land which the State may buy, for the better protection of the timberlands of the State, and, in general, for all the purposes that would make up the work necessary to do in connection with public forestry.

Mr. McLAUGHLIN of Michigan. Is there any sentiment in Wisconsin favorable to the passage of a law that would make taxation easier or that would forgive taxation altogether on lands devoted to forestry?

Mr. CAMPBELL. I think there is a very sound sentiment in that direction.

Mr. McLAUGHLIN of Michigan. Has the legislature ever considered measures looking to that end?

Mr. CAMPBELL. It has not heretofore, but it will be urged to do so at the next session of the legislature. In all probability the legislature will be urged to do away with the annual tax on timber crops, which is like taxing a farm crop every week during the year. In all probability it will do away with that tax and provide for a stumpage tax when the timber is cut, much on the principle of the iron ore tonnage tax that Michigan formulated some 10 or 12 years ago.

Mr. McLAUGHLIN of Michigan. They talked about it in Minnesota.

Mr. CAMPBELL. I meant in Minnesota. If I said Michigan I meant to say Minnesota.

Mr. McLAUGHLIN of Michigan. There was some sentiment in favor of it, but the legislature never enacted it.

Mr. CAMPBELL. Yes; that is right. I think that is all I want to say, Mr. Chairman. I do not want to take any unnecessary time, but I must say that we do look to Congress for leadership in this movement for help to the States, and for measures that, in my mind, after long and careful study, I think are most necessary. I have no interest in any wood-manufacturing or wood-using concern. I have no forest land. I have no private interest whatever. From long and serious consideration of the matter I think we are hastening to a time that, in more ways than one, will be full of distress to us, and I think we can not act too soon.

The CHAIRMAN. Do you think there is a possibility of regrowth of timber in your State?

Mr. CAMPBELL. Oh, I am sure of that, Mr. Chairman. We will go ahead and do what we can, irrespective of what Congress may do, but a measure like this enacted by Congress will be a tremendous help to us.

The CHAIRMAN. How would it be accomplished, by private owners or by the State?

Mr. CAMPBELL. As I say, for the immediate future I have not much confidence in the reforestation of private lands. I think the Nation and the State both must begin that work intensively themselves, and set an example over a period of some years. In Wisconsin it will begin in a desultory way as soon as we can get the right kind of legislation, but it will take a long time for it to attain anything like the volume that may be appreciable.

Mr. TEN EYCK. Have you ever appeared before your State legislature to ask for an appropriation for this purpose?

Mr. CAMPBELL. Yes, sir; at the last session of the legislature I appeared before the legislature in the interest of some four forestry bills and in the interest of the constitutional amendment, and we were all very greatly gratified to have the legislature set the constitutional amendment in motion and enact all these bills without any serious opposition being developed. There is a very strong healthy sentiment in Wisconsin which is helping us.

Mr. TEN EYCK. What is the total of some of those appropriations?

Mr. CAMPBELL. I think I ought to make this explanation, that until the State constitution is amended Wisconsin can not engage in State forestry on a large scale, can not go out in the market and buy land directly for forestry purposes, can not engage in tree planting for commercial purposes, and recognizing that fact, we advocated these measures which are preliminary, which tend to organization and getting ready for work and building up forest reserves, so that we would be all the farther ahead when the constitutional amendment is enacted.

Mr. TEN EYCK. To-day you could not take advantage of Federal cooperation if this bill were passed?

Mr. CAMPBELL. Not anything like to the extent that we would want to. Of course, we could take advantage of the matter so far as fire protection is concerned. We could take money for nursery work and for some other purposes, but we are constitutionally barred from going into the work in a full way.

Mr. TEN EYCK. What was the appropriation last year of the State Legislature for nursery work and for fire protection?

Mr. CAMPBELL. For fire protection, I think—now, I have all those figures in my office.

Mr. TEN EYCK. You can put them in the record.

Mr. CAMPBELL. I have not those figures here and I do not want to say this definitely, but my impression is that there was a bill passed—and I did not appear in connection with that bill—which allowed \$25,000 for fire protection of State lands.

Mr. TEN EYCK. And how much for nurseries?

Mr. CAMPBELL. Well, so far as the nursery work is concerned, the State Conservation Commission would have authority to set aside a few thousand dollars for that. They could do it and supply seedlings for State parks on any such pretext. But we have to work a bit indirectly now until we get the constitution amended.

Mr. JONES. Do you not think that if adequate fire protection is furnished, your State with your people could work the problem out themselves, with the present protection under the laws of the State?

Mr. CAMPBELL. No, sir. There is a great deal of research that is necessary. I do not think that can be done to any greater advantage with forestry, any more than the agricultural interests of this country could be developed to the

greatest advantage without such assistance as the State and National Government can give.

Mr. JONES. The National Government is conducting some investigations under the present system and furnishing some information?

Mr. CAMPBELL. Yes, some information, and helping in every way in its power, but with an appropriation that I believe is rather small, and which limits its activities and usefulness.

Mr. JONES. If they have the adequate appropriations to carry on the work that they are now equipped to do and that they are now authorized to do, when you put that alongside of adequate fire protection, would not that enable your State to handle the problem itself pretty well, with the sentiment that is created there by those who are interested in the work?

Mr. CAMPBELL. I want to speak frankly, and yet a little bit carefully. I think our State is going to engage in this work much more extensively than at present, no matter what the National Government is going to do, and any aid that the National Government is going to extend to us will help us just so much more.

Mr. JONES. But the National Government must secure what money it gives, by taxation. It is not a money-making institution, and what money it distributes must first be taken from its people.

Mr. CAMPBELL. Surely.

Mr. JONES. Now, unless there is a national interest that is sufficient to justify the Government doing more than is being done now or unless there is a lack of ability to do it on the part of the States, I do not see why the National Government should take charge of the matter and assume to make rules and regulations.

Mr. CLAGUE. Some time ago the South was interested in fighting the boll weevil, and we appropriated \$400,000—

Mr. JONES. Yes; that was a case where the boll weevil was brought across the international line, and in order to stop the boll weevil it was necessary to stop the importation of cotton across the international line, which the State could not do, because it was an international question. Then Arkansas and Louisiana and other States wanted to forbid the importation of cotton from Mexico, but no State can do that under our Constitution, because that is an international question.

Mr. CLAGUE. I think there was even a provision for paying rent on your land.

Mr. JONES. No. The National Government said it was a matter which we could not handle. Our State was perfectly willing to take the necessary steps to that end; but under our scheme of government we could not forbid the shipment of cotton from old Mexico into the United States.

Mr. McLAUGHLIN of Michigan. They could have forbid the planting of the land, and they asked the Federal Government to pay for the planting of the land.

Mr. JONES. They did not forbid the planting of the land. And furthermore, the National Government was interested in the question. It was something that was spreading all over the country. Our State was willing to handle it, but it could not handle the whole problem. Now, this is not a matter that spreads from one part of the country to another.

Mr. CAMPBELL. Let me say that forest growth has its diseases just as farm crops have their diseases.

Mr. JONES. Yes; I am favorable to the National Government taking care of those diseases that spread from one State to another, and furnishing remedies. They can do that under the present law, and I am in favor of that law. I am in favor of the present law and I am in favor of the Federal Government furnishing fire protection.

Mr. CAMPBELL. But over and above everything else is the need for national leadership, the need for national help to the States. I say that, and I am naturally a reasonable and conservative man.

Mr. JONES. Would you favor the National Government furnishing fertilizer to the farmers?

Mr. CAMPBELL. No.

Mr. JONES. The Government could do that, you know?

Mr. CAMPBELL. The Government can not do everything, but the Government can help to provide for one of the chief necessities of life. Now, I am conservative of mind, I think—at least I hope so—but I do see a great and acute emergency before this country; I do see the need for action, and action in time—that is, as much in time as we can take it now, because we should have taken that action long ago. I think there is the utmost necessity, a compelling necessity, for the Nation and the States—I mean the States that can grow timber—to do everything possible as soon as possible. Otherwise there is going to be serious economic trouble and perhaps suffering inside of 50 years.

Mr. JONES. Do you think that that can not be handled? Do you think the State will not reforest the forest lands unless they do get Federal aid?

Mr. CAMPBELL. Some of the States will, possibly all of them will, but with Federal aid all the States will do so very much better that it is in the interest of the people themselves that help should be extended to them.

Mr. JONES. I may be recovering the ground in this question, and if I am tell me and I will desist from further questions along this line, if this has already been brought out. About what percentage of the land that is involved in your State is privately owned land in this problem of reforestation?

Mr. CAMPBELL. Almost all of it, I should say. The State owns about 300,000 acres. I forget what the total acreage of Wisconsin is, but 300,000 acres is a mere drop in the bucket. There are about 3,000,000 acres, it is quite certain, that will grow timber, that is not agricultural land. Our idea is for the State to get control of as much of that 3,000,000 acres as possible, as fast as possible, and reforest it.

Mr. JONES. I have no complaint at all in any way of the Federal Government making any appropriation that is necessary for stamping out any evils that may destroy, and any disease that comes along, like tuberculosis of cattle, or disasters like forest fires or anything of that kind, anything which can spread and destroy. But it is a good big problem to undertake, as a general policy, which would take money out of the Treasury for the purpose of replanting and growing an industry.

Mr. CAMPBELL. Let me say just this: That this is a step that every other civilized country on earth has had to take, and it is a step that we will have to take sooner or later.

Mr. JONES. But those countries are all very small, are they not; not much larger than one of our States?

Mr. CAMPBELL. I do not know but what the question of smallness is on the other side of the argument.

Mr. JONES. Well, that may be.

Mr. CAMPBELL. When you consider that countries as small as France and Germany are devoting a large amount of their total acreage to growing forests, because they realize the necessity for it, and then contrast that with our policy of allowing millions and millions of acres to lie idle and unproductive in the face of a very plain need for timber within 30 or 40 years, I think that they are to be commended because of the vision that they are showing in devoting some very considerable part of their country to such purposes.

Mr. JONES. But most of those countries are much more depleted in that way than ours.

Mr. CAMPBELL. No.

Mr. JONES. Take France, for instance. France is very greatly reduced in her timber supply.

Mr. CAMPBELL. France has great forests still, and some of her great forests were destroyed during the war. One of the first things that she has set about doing since the end of the war is to restore those forests that were destroyed, because she knows the need for them.

Mr. JONES. Are those privately owned forests?

Mr. CAMPBELL. Some of the forests in France are privately owned—the majority of the total forest acreage.

Mr. JONES. Where she is making appropriations to rebuild those forests, is she leaving them in unlimited private ownership?

Mr. CAMPBELL. She is rebuilding the State forests and encouraging the restoration of the private forests.

Mr. JONES. She is not making appropriations to restore private forests?

Mr. CAMPBELL. Oh, no. I do not know of any nation that is doing that.

Mr. KINCHELOE. I was impressed with your statement a while ago; and your idea was, as I understood it, that the proper way was to reforest the Government forest reserves and State-owned lands; that you thought it would be somewhat impracticable to undertake to reforest private lands, because however patriotic the private owner may be, he is not going to expend any money on his land unless he is going to get some revenue out of it. But if all the Government domain was reforested and protected and all the land owned by the forest States was taken care of in the same way, do you not think that would solve this problem with the encouragement given to the private owners?

Mr. CAMPBELL. I do not think that would be sufficient. The Nation has large forest reserves—

Mr. KINCHELOE (interposing). One hundred and fifty-six million acres.

Mr. CAMPBELL. In the forest reserves?

Mr. KINCHELOE. Yes.

Mr. CAMPBELL. Is it as large as that—outside of Alaska?

Mr. KINCHELOE. Perhaps I may be mistaken. Of course, I do not know how many acres are owned in the various States. I do not know whether the Forest Service knows.

Mr. CAMPBELL. There is a question of how thick that timber is in the national forest reserves, and I wish to say that I have never visited one of the national forest reserves and I do not pretend to be informed in that regard.

Mr. KINCHELOE. I am talking about the activity of the Government to reforest the lands that have been depleted, together with State lands in cooperation with the States.

Mr. CAMPBELL. If the National Government would reforest any bare lands in the national forest reserves and enlarge the national forest reserves, as opportunity offered, and as deemed desirable, and if the different States would acquire their nonfarming lands as forest reserves and start growing timber in those lands, I think there is every reason to believe that there would be a sufficient supply of timber.

Mr. KINCHELOE. It would be a wonderful step in the right direction, to say the least of it. Do you not think it would be more practicable for the States and the Government to have supervision over these domains?

Mr. CAMPBELL. I think it is a far more practicable thing to do now, because—and I want to be perfectly frank—we will come to private reforestation, but it will take time. It should be encouraged as much as possible, I believe, but my chief hope of a new supply of timber rests upon national and State reforestation.

The CHAIRMAN. What is the present price of cut-over land?

Mr. CAMPBELL. About 9 or 10 years ago when the State was buying lands they got them at somewhere around \$3 an acre. I think that at the present time a great deal of forest lands, nonagricultural lands, could be bought for something approximating that sum. The depression in the lumber and other regions will probably result in the surrender of land for nonpayment of taxes.

The CHAIRMAN. What about the pine blister? Has it got across the river into Wisconsin?

Mr. CAMPBELL. It has manifested itself in different parts of northern Wisconsin.

The CHAIRMAN. To some considerable extent?

Mr. CAMPBELL. To some very noticeable extent.

The CHAIRMAN. That is quite recently?

Mr. CAMPBELL. Yes; very recently.

The CHAIRMAN. Within the last year or two?

Mr. CAMPBELL. Yes; within the last two or three years.

The CHAIRMAN. There was none there two or three years ago?

Mr. CAMPBELL. I am not sure. I do not think so.

Mr. TEN EYCK. In section 3 of this bill, H. R. 129, there is an appropriation of \$3,000,000 for a survey of the entire United States, of its forest lands. What do you think of that section?

Mr. CAMPBELL. It seems to me that would be a very valuable and advantageous thing to do, to make a survey of all forest lands of the Nation.

Mr. TEN EYCK. We would be in a better position to consider the rest of the bill if we had all that information.

Mr. CAMPBELL. Yes; I think so.

Mr. TEN EYCK. At least, we would know what we were talking about.

Mr. CAMPBELL. Let me explain this. The work of reforestation will necessarily be slow. The Nation itself can not do a whole lot of work; neither can the State do nearly as much as the Nation can, but we know this much about the production of timber, and that is that where pine has grown once it will grow again, and the foresters will have no trouble at all in selecting suitable tracts of land for that work.

Mr. TEN EYCK. This survey would enable the Government to take a stand and have a policy as regards its fire protection, reforestation, and everything else?

Mr. CAMPBELL. It would be a great help in shaping the eventual policies of the Government, but I would not wait for that survey to do the work. If you will permit me to express my personal opinion once more, I will say that some of the appropriations made in this bill for different kinds of work are very much below the amount that they should be. For instance, in section 1, in regard to fire protection, there is an item of \$1,000,000. Without being an ex-

pert on fire protection or claiming to know much about it, I would say that is very inadequate for that purpose in this country.

Mr. KINCHELOE. You think that would be very inadequate, taken in connection with section 3, which appropriates \$3,000,000 for the survey. Do you think it would take that much to make a survey? Of course, they would not actually go around each tract of land.

Mr. CAMPBELL. I have a great deal of confidence in the Agricultural Department and in the Forest Service.

Mr. JONES. Could not information of that kind be largely secured from reports of State forestry associations, where they have associations?

Mr. SNELL. We have a man, who will come in later, who will address himself to that section. Each one of these gentlemen is prepared to answer questions on specific phases of the bill.

Mr. McLAUGHLIN. We would rather hear from the man who will discuss the constitutional question.

Mr. SNELL. We had that man at the other hearing.

Mr. McLAUGHLIN of Michigan. What hearing do you refer to?

Mr. SNELL. A hearing we had on this bill last winter. However, we will provide the committee with briefs on that question if we are not able to get him here. Mr. Kellogg informs me that we will probably have him here tomorrow.

Now, Mr. Babbitt, of the Association of Wood-Using Industries, will address himself to the need for study in wood utilization.

STATEMENT OF MR. WILLIAM A. BABBITT, CHAIRMAN OF THE COMMITTEE OF STANDARDIZATION OF THE ASSOCIATION OF WOOD-USING INDUSTRIES AND GENERAL SECRETARY OF THE NATIONAL ASSOCIATION OF WOOD TURNERS (INC.).

Mr. BABBITT. I wish to explain, gentlemen, that I am not a forester and I am not a lumberman, but possibly in the few moments that I will speak from the utilization end of this project I can lead you a little way out of the woods.

Mr. TEN EYCK. Whom do you represent?

Mr. BABBITT. I represent the Association of Wood-Using Industries. I am not a forester or a lumberman.

Mr. TEN EYCK. You are not connected with the forestry department of any State?

Mr. BABBITT. No, sir. I wish to speak specifically and directly with regard to section 4, which up to the present time has not received, as I believe, any particular discussion. I can not pretend to be in any position to pass on the methods that are proposed by the first two sections of this bill with regard to the best way to secure cooperation under Government leadership from State and private interests throughout the country, but I am prepared to place before you gentlemen some evidence with regard to what is being done through the stimulating leadership of the Federal Government through its Forest Service.

In order that this matter may be brought to a brief and definite focus I have surrendered the privilege I usually claim of speaking extemporaneously, and I want to read to you from some notes, and I will be glad to be interrupted at any time with any question that I can answer, and if I can not answer I will be very frank to say I do not know.

Mr. TEN EYCK. You are connected with the organization called the Wood Using Association?

Mr. BABBITT. The Association of Wood Using Industries.

Mr. TEN EYCK. You represent the consumers?

Mr. BABBITT. Yes, sir.

The CHAIRMAN. The manufacturers of the wood?

Mr. BABBITT. Manufacturers, fabricators, and users of forests in general. It is a rather loose organization; that is, we have no paid officials. It is simply an organization drawn together for the purpose of developing the problems of the forests as they affect the consumer of forest products.

In supporting before this committee H. R. 129 it is my intention to confine my remarks as closely as possible to section 4. At first blush, if you glance over this section, you will see that it seems to be a sort of catch-all, into which the odds and ends of the activities of the Forest Service have been swept. But in line 15 the vast practical purpose of the section is clearly stated, namely, to promote the most effective use of forest products in the United States.

This section represents the barest outlines of a policy of the Forest Service to gear its scientific resources into the machinery of productive industry in order that the harvest of the forest, conserved and increased to the greatest possible extent, may not become inadequate to the needs—the ever-growing needs—of the American people, because the harvest itself is largely squandered by wasteful methods of utilization. Furthermore, this project is before you to-day, I think, for the first time—that is, the interests I represent—supported by an intelligent and alert industrial leadership, ready and eager to trade dollars and brains with the Forest Service in order to make effective the declared purpose of this section, “to promote the most effective use of forest products in the United States.”

Now, gentlemen, you are competent through your legislative powers to pass such a scheme of Federal direction over the forests as is set forth in the Capper bill. You can put that into execution, I doubt not, and hire the necessary brains to bring it about. I want to make it plain to you that you have got to have the cooperation of a large amount of the brains that you can not buy, that you can not direct. It must be a free and spontaneous outgiving of the cooperative spirits that organize with the first words of our Constitution, “We, the people of the United States.” Speaking personally, it seems to me there has been too much distress of the industries connected with this great industry, second only to one other in the United States, and that is the great industry of the woods, as to its integrity and its determination to live up to the highest standards of American business and national life.

The other sections of this bill are concerned with the growth of the forest crop and the incidental utility of the forest as a flood control, as a cover for game, as a playground for the people, etc. But we must not forget the true end, the economic end, of every tree in all the forests is the service of man in some kind of forest product or other. This section has to do not with growing this century-slow crop but with harvesting it rightly.

It may be claimed that we get little assistance from the forest procedure of the Continent, and I think it is a great mistake to hold such a view. We have been greatly helped. We have learned to our sorrow that we have many things to get in the way of wise methods from the other side of the ocean, and any of you who have been with me through any of the experience of the war period knows how true that is. But at all events in this work of utilization we are wonderfully helped by the fact that we can get so much from the far advance that the industry has made on the Continent.

Mr. JACOWAY. In order to get your premise is it your idea that the way that timber is now utilized a vast portion of it subserves no use and goes to waste?

Mr. BABBITT. Yes, sir.

Mr. JACOWAY. Is it your object to take every possible part of every tree that grows in the forest and put it to some good use?

Mr. BABBITT. That is our goal; yes, sir.

Mr. JACOWAY. Take the larger lumber concerns of the country, that are organized to the maximum of efficiency, would you say that any part of the timber that they saw or deal with is not put to some good use?

Mr. BABBITT. I would go further back than that. I would say that there is no such concern that is organized to the maximum of efficiency.

Mr. JACOWAY. But they come nearer to it?

Mr. BABBITT. Yes, sir.

Mr. JACOWAY. Then you think the greatest economic waste is in the small sawmills?

Mr. BABBITT. No. I think I can develop that a little later.

Mr. JACOWAY. That is all I want to ask now.

Mr. BABBITT. I want you to see what is happening actually in tangible things that count along this line. Within the past five or six weeks no less than 100 of our great mills have registered with the committee on standardization, of which I am the chairman, as manufacturers under a standard inspection rule of dimension stock, and this dimension stock comes almost entirely from stuff that was before wasted.

The time is so short that I shall not attempt any thoroughgoing discussion of the scope of this section 4, but rather to get before you a picture, or, rather, vision, of the size and importance of the job which the Forest Service asks this committee to authorize it to attack. Not being a technician, it will serve to put me in an easy frame of mind and contribute to my service before this committee if you will allow me to consider you for the moment as my board of directors to whom I am making a report on the available and most economic

sources of raw materials for the great woodworking industry. I assume that you are all aware how rapidly the visible supplies of timber are dwindling before the combined attacks of fire and necessary lumbering operations. This has been clearly established by our field staff. For the first time we are driven by economic pressure to study utilization as a capital measure of piecing out our dwindling supply. In order to visualize the size and possibilities of this measure our statistician has drawn up a chart, based on original data supplied by the Forest Service and corrected and extended by further extensive studies by private initiative from our private agency.

I have prepared the story, gentlemen, and here is the problem in chart form, which I am prepared to distribute to the committee. This chart is a chart of 100 per cent practical utilization of the forest products, except that so few trees are available for tanning purposes that we have concluded that it would be on the side of conservatism to leave out the bark of the tree as a permanent loss.

Now, reading across the top line of this chart, of the 100 per cent wood in a tree there is 16.6 per cent tops, limbs, and stumps; 10.9 per cent bark; sawkerf, 10.9 per cent; slabs, 10 per cent, which are wasted as a rule; edgings and trimmings, 10 per cent, of the same general character; miscellaneous, 2.5 per cent, covering unexpected difficulties that occur; seasoning, 5.6 per cent; lumber, 33.5 per cent. So that when we cut a tree and get into the lumber we have only 33.5 per cent of the rough material. The lumber industry is an industry of tradition, like all other industries, and the fact of the matter is that when we come to examine what this 33.5 per cent of lumber actually means in terms of fabrication, we find that there is another astounding fact in connection with it, namely, that we have to take this lumber and cut it up into pieces.

Everything in this room here is made up of some kind of dimension or other. Now, in the fourth line of this chart you will see that this 33.5 per cent of lumber produces 16.3 per cent waste. That is due to the large amount of low grade lumber which is found in practically all trees in these days. So that out of the 100 per cent of cubic content of that tree we get 17.2 per cent clear cuttings. Now, in practically all the small operations and in most of the large operations the net result that is delivered to the fabricating plant in the form of clear cuttings, ready to be assembled into furniture and other articles, amounts to only a little over one-sixth of the content of the tree.

The last line of this chart shows that if the wood in a tree were fully utilized, the bark would find its place; the stumps would be left, 5 per cent; seasoning would do its more or less disastrous work, 3 per cent; leaving 25 per cent clear dimension stock, and the remaining 67 per cent, practically all of which is now wasted, would be available for pulp or distillation.

We understand when we make these claims that it is not a theoretical experiment. I can take you to a plant in this country where that is done to-day, where they get 100 per cent, in Michigan, where they tear the roots out of the ground. Taking it as it lies, it is fairly representative. This proposition has been submitted to scores and scores of forest authorities. It originated in an authoritative way and it was carried out still further, and taking it as it lies, it gives a fair idea of the problem that confronts us.

Mr. TEN EYCK. Can all character of wood be utilized in that way?

Mr. BABBITT. Practically so.

Mr. TEN EYCK. What do you mean by distillation? You spoke of a certain percentage used for distillation?

Mr. BABBITT. That is for wood alcohol; but I will say that if you go to the Forest Products Laboratory in Madison, they will show you how to make grain alcohol from wood.

Mr. JACOWAY. Could all of this lumber be used with the present equipment or would it require reorganization? It would take a lot of machinery and overhead charges to get the maximum out of a tree, it seems to me.

Mr. BABBITT. That is true. It would require a reorganization of the mechanical equipment and a coordination of the various factors that take from the forest what they require. But I will dwell on that point to some extent later, or if you desire I can take it up now. For example, take the slab waste of a country mill, and this has been done in Maine. Up at Brewer, Me., we made an arrangement with a paper mill to take the mill waste that was developed in sawing spool-bars, turning bars for the American Thread Co. We got this waste into the paper plant and they paid the same price by weight as they would pay for pulp wood, and it was to their advantage.

Mr. JACOWAY. Right there is a question. How far do you have to haul it?

Mr. BABBITT. You can haul this waste just as many miles as you can haul pulpwood.

Mr. JACOWAY. Can you haul it as many miles as good lumber and declare a dividend?

Mr. BABBITT. No; I do not think so.

Mr. JACOWAY. How many acres would it take to carry out this program of utilizing every foot of timber in the country?

Mr. BABBITT. We have approached it from another point of view. Now, for example, through the process of this waste that has been going on down in Arkansas, they are cutting over oak country that will not produce 500 feet to the acre.

Mr. JACOWAY. That is where I am from.

Mr. BABBITT. I understood that. I knew where I was and what I was saying. And right there let me say that you have the most splendid stand of white oak in the country. Beginning in Kentucky and swinging down around through Missouri were the best oak forests God ever made, that I ever put my eyes on, but they are all gone now. At Cape Girardeau a short time ago they cut the last stand of virgin white oak. Now, we figure that any plant or combination of plants—we know this is done in Michigan—that can ship to a central point their waste products which develop in the cutting of 15,000,000 feet of lumber has an ample supply to run an economical dividend-producing reduction plant of some kind, either pulp or destructive distillation, or a combination of both.

Mr. JACOWAY. Then, in a community with 1,000,000 feet of lumber on the stack, ready for the planer, it is your argument that 670,000 feet have been wasted in cutting up that much clear lumber?

Mr. BABBITT. Yes, sir.

Mr. JACOWAY. That is all.

Mr. BABBITT. It is not an argument, though; it is a plain statement of fact.

Mr. JONES. Would you have the National Government require that this new process be utilized, or would you have them furnish the information and let it be done as a business proposition?

Mr. BABBITT. Your questions run so far ahead of my text that I almost wish you would hear me through and save the questions, because you will find that these points that have been touched on are all covered later on.

Mr. JONES. All right; go ahead.

Mr. BABBITT. I want to call your attention to the fact that now we have experienced an enormous new economic pressure that has been brought to bear upon us as one of the heritages of the World War. I refer to the freight cost on low-grade lumber. During the last and probably the most disastrous year in the history of the American lumber industry it has not been possible to market to any extent low-grade lumber, especially in hardwoods.

I do not think I ought to say "especially." I have been offered a great deal of softwood, and I was offered millions and millions of feet of low-grade hardwood for our industry, as well as pine, just to clear it up.

Mr. JONES. Can you state how many feet?

Mr. BABBITT. About 26,000,000 feet.

Mr. JONES. At what price were you offered that low-grade hardwood?

Mr. BABBITT. If I would take it away, that was all.

Mr. JONES. As to the low-grade hardwood and the pine?

Mr. BABBITT. As to the low-grade hardwood, but as to the pine I can not answer. I can put that in the record. In fact, I have the whole thing in print.

Now, this low-grade product of the log is, roughly speaking, 30 per cent to 35 per cent of the entire lumber output. I have personally been offered unlimited quantities of low-grade lumber, both hard and soft woods, at prices which would not pay the loading charges.

In order to get this situation graphically before you, our statistician has prepared a freight chart which gives conclusive answer to reasons why the intolerable rate situation has gutted the resources of the lumber industry and made unavailable nearly one-third of the visible supply of our actual lumber resources.

I regret to say we could not get this published because we did not have the funds. This shows you a chart of the freight situation, which proves that low-grade lumber is worthless except in the narrow radius of the mill, and shows how completely it has succeeded in choking and throttling the lumber industry during this last year.

It is a tragic thing, gentlemen. It is not merely a moderate thing. It is tragic in its effect.

Mr. CARAWAY. What would you call the low grade?

Mr. BABBITT. No. 3 common and poorer in hardwood, and the low-grade boards, Nos. 1, 3, 4, and so on, in the softwood. There are so many different grades in the soft I would not undertake to tell you, but the secretary of the Lumbermen's Association is here and can tell you about that. He will be glad to do so.

May I observe in passing we are not able to submit to you this chart in published form for your convenience and the information of the industry generally. We got the other one published by an enterprising trade paper, but this one was passed up. I was sent out by our people to make a survey of the resources of wood for our industry. We were alarmed by the reports that came out from the Forest Service and from the State foresters and from our own people as to the condition, and so we made a survey, which I wish to submit to you.

The next matter which came up for investigation in our problem of raw materials upon which our industry depends was the question of personnel. To this end I sent out a questionnaire to a long list of correspondents who were manufacturers of lumber and whose locations were in all parts of the country. The returns on the questionnaire clearly established the fact that the harvest of the forest is a farm crop. Excluding the west coast, where the character of the forests presents exceptional conditions, and with rural population sparse or entirely lacking, nearer 90 than 80 per cent of the men who harvest the forest crop are farmers or farm laborers, and fully 90 per cent of the draft animals in these operations are farm stock.

In all sections of the country except the West coast, possibly, the forest areas are becoming farm woodlots; and the portable mill is fast crowding out the large operation. In many sections this process is complete. At all events, it is correct to say that the forest harvest is the farmer's winter meal ticket.

I wish we had time to elaborate upon these facts. It is easy to get visible proof. If you will take a density map of savings banks and place it over a density map of the farm woodlot country of New England where the small country sawmills and wood-working plants flourish, you will find the two to coincide almost town to town. What is the reason? Why are not these rich savings banks west of the Mississippi? The answer is undistributed overhead. The New England farmer has an unfailing winter crop to harvest, which pays his running expenses and something to put in the bank. The Midwest farmer has to make the earnings of seven or eight months pay the year's expenses. Consequently, having no let-up on his overhead account, and no unfailing winter harvest to draw upon, a bad winter and a following poor crop, or a poor market for a good crop, puts him in financial distress. A few years ago there was a savings bank in my town that had a large deposit in it, and there was also another savings bank that had the largest deposit between Burlington, Vt., and Chicago. You had to get clear to Chicago before you could find a bank to compare with it. What is the reason? The contrast between Indiana, which is now a farm-land State, though an immense producer of field crops, and Kansas, with no farm lots, is strikingly in point. May I sum this matter up with the statement that the problem of keeping the farm personnel busy and productive economically 12 months in the year is the major problem now crying for solution. I believe strongly that the Forest Service has a great opportunity and duty in this connection. At all events the Forest Service stands out in clear light as a vital factor in the agricultural development of this commonwealth, and is not to be made the tail of any national-park kite however enticing that scheme may seem to certain uninformed officials and informed interests.

Lo, the poor lumbermen! Since all the Indians have become rich through the unearned increment of the real estate which Uncle Sam compelled them to accept, I do not think that anyone, all things considered, will deny their right of succession to the title of Poor Lo.

I have to report, however, that while the forest harvest is of great economic importance to the farmer, to the lumberman it is more than that. It is everything. Furthermore, he is now and will be for years to come our main dependence for raw materials for this great woodworking, home-building, and home-furnishing industry of ours. Speaking in absolute terms, he has been a great waster of the forest crop as well as the forest harvest. But practically he has been a waster only as economic pressure has compelled him to waste. I

ave yet to meet a lumberman who is not eager to carry utilization to the utmost permitted by existing economic conditions. It is a mere truism to insist that he wants to get the largest possible return from his stumpage, and will fight for it whenever and wherever he sees a chance to do so. The same observation applies to the wood fabricator. Both are conservative, both suspicious, especially of each other; both must be shown all the way; both are reluctant to change from the methods upon which their past successes are built and to try new methods which are proposed by people who never ran a sawmill successfully or never made a woodworking plant pay a dividend.

Why is Federal action opportune? You have before you the evidence of the size and the importance of the job contemplated by the legislation proposed by section 4. May I proceed now to outline certain definite problems which have been isolated and defined by various groups, some of which have been successfully attacked and a few of which have been worked out successfully? Instances chosen are not always on account of their absolute importance but simply because they illustrate the reasons why a comprehensive and insistent program of study and education in the problems of utilizing to the fullest limit economically possible the harvest of the forests.

Now, for example, there are problems of waste, and they are perhaps some of the larger problems of waste which have to do purely with the matter of economic pressure. They can be handled or they can not be handled, according as economic pressure exists.

I have here, gentlemen, which I will ask you to return, keeping one of them for reference, three photographs of the same district that were very kindly loaned to me to-day by the Department of Commerce. Those pictures are the pictures of a pile of sawdust near a sawmill in Sweden, and if you will turn them over, on the back you will see the notation of Mr. Oxholm to the effect that the valuation placed on that pile of sawdust is \$10,000 American money. You would have hard work, gentlemen, to find an American sawmill owner that would not consider that pile of sawdust a very heavy liability, to be gotten rid of in some way, carted off or burned or otherwise put out of existence. And yet their valuation is correct. I picked up this picture here illustrating in such a striking way how the economic pressure has so much to do with the problems of utilization. We know just as well as the Swedish lumberman what can be done with that pile of sawdust. But, as we are now organized, it will not pay. Until it does pay it will not be utilized.

This summer I was up in Minnesota and we were driving along and we saw there a 40-acre lot. It was a thick lot of hardwood growth. The farmer had cut a row down the middle, and he lopped the whole thing over toward the center and set it afire. Why did he do it? He did it because it was the only way he knew of to get rid of that wood. The wood was a weed and disturber of agriculture; there was no economic pressure that could bring that wood and put it on the market.

The CHAIRMAN. Can it ever be made to pay; that is, the sawdust?

Mr. BABBITT. Yes, sir; unquestionably it is being made to pay in the State of Michigan in two great plants to-day.

Mr. KINCHELOE. How do they utilize this sawdust?

Mr. BABBITT. They subject that to the process of distillation. In the plant at Marquette, Mich., they reduce it to acetones and so on, and sometimes they also put it into charcoal and use it in making iron. At Marinette they use it in making alcohol. They clean up everything from 12,000,000 feet of lumber.

Mr. KINCHELOE. What is the estimate of its value at Marinette?

Mr. BABBITT. I have not the figures here just at this moment.

Now, we have the serious problem due to defective technique. Here is a photograph that was taken from my own files. It is a fair exhibit of three carloads of turning squares received by a northern plant from a southern mill. A turning square to be usable must be sawed true and square, and have the same size throughout. I challenge you to find two squares of the same size. These squares were produced from edgings, slabs, and cull lumber, in fact represented real utilization of waste, which failed on account of poor manufacture.

Then, again, we have the problem due to defective standards or the lack of them. Some of these things sound absurd to you, gentlemen, but I assure you that the writer is a business man, and he represents a business group and he does not take much chance in guessing at things. We know what we are talking about. These figures were prepared by my statistician and I checked them.

In investigating the shop practice of farm wagon manufacturers the speaker found variations of as much as 31 per cent in the amount of lumber put into a wagon part of a standard size. Another has for years made 26 different styles of neck yokes for four sizes of farm wagons. A very important handle manufacturer gets 21 per cent fewer handles from a thousand feet of lumber than one of his principal competitors. Now, you ask how it could be that there could be that variation of 31 per cent in the amount of lumber used to make an identical thing. I had a knock-down and drag-out fight and I got dragged out by the rules committee of the National Hardwood Lumbermen Association because they insisted that they should be allowed to put one-eighth of an inch on turning squares. Do you have any idea what they were losing when they added one-eighth of an inch and insisted upon selling it and having it taken in as an inch square? You take an inch square and you will find that its relation to the cubic contents of an inch and one-eighth square shows that the man who sold an inch and one-eighth for an inch waste fails to realize on 25 per cent of his lumber. The trouble with we American people is that we have despised the day of small things and the big things depend on small things.

Mr. JACOWAY. When you get lumber that way, do you not have your specifications?

Mr. BABBITT. No, sir. We specify that it must be exactly an inch square. We would pay for that square as a rough dry inch square. Now the national rule insists that they shall be allowed to load in their 1½ inch squares. When they do that they lose 25 per cent of their lumber and then they get us in trouble because we have to cut off and dispose of 25 per cent more material than otherwise we would do, and in that way we clutter up our productive schedule, we get behind on other items and the losses are very great to us. When we order an inch square that is what we want.

The CHAIRMAN. How do you know what to allow when you order an inch and one-eighth?

Mr. BABBITT. They want to allow that for sawing. We do not want them.

Mr. JACOWAY. You can take that piece of lumber and plane it?

Mr. BABBITT. We can not afford to do that. There is not enough money in the lumber business to go through such operation as that.

The CHAIRMAN. But you would not expect the Forest Service to regulate the sawing, would you?

Mr. BABBITT. No, sir; but the thing I want to get at is this. Here we are at the bottom to come up, making a noise about these things that ought to be corrected and we want to impress it upon you gentlemen that this is a tremendous educational problem, and I want to show you what it means to investigate one of these problems and I have all the dope here.

Mr. JONES. You do not want the National Government to do all this by regulation, do you?

Mr. BABBITT. No; but to do it by conservation. We got a little appropriation last year and we started to carry it out. You can see the fruit. When we come here and tell you we mean cooperation, by thunder! we mean it and we are going to put it across with you if we get a chance.

Mr. JACOWAY. Suppose you produce an order for 100,000 square feet of flooring. You buy that in the rough, I assume. You contemplate it is to be run through the planer. You would have to allow some for what the planer would take off, would you not?

Mr. BABBITT. The proposition involved is not hardwood flooring, but specific places where a specific waste occurs, and that is in getting these squares, of which something over 1,000,000,000 feet is used every year, from the mill sawed too big with the tremendous waste attached to them.

The CHAIRMAN. What are these things used for?

Mr. BABBITT. For chair parts, dowels in wood-turning plants.

Mr. KINCHELOE. Do you get any pay for it?

Mr. BABBITT. No, sir.

Mr. KINCHELOE. What are you after then?

Mr. BABBITT. It is defective technique. These are the points that show the things that have got to be handled in this educational problem.

Mr. JACOWAY. I do not know anything about the kind of product you are talking about, but if you want to buy 100,000 feet of hardwood from a producer your contract would call for about one-ighth inch more than the finished product would turn out, and if you did not enter into that kind of contract your mill would not sell a foot of lumber.

Mr. BABBITT. Very true, but the flooring is a highly developed and highly specialized matter. Suppose when we cut that flooring we find instead of allowing an eighth of an inch they allowed an eighth of an inch more, we would not like it.

Mr. JACOWAY. But they do not do it.

Mr. BABBITT. They do it in the other case.

Mr. JACOWAY. They allow just enough to have it planed. Is that analogous with this problem you are talking about?

Mr. BABBITT. No; there is a case where it is all right. But we are hunting out these things that are all wrong.

Mr. JACOWAY. Then, in some cases a man has to suffer an economic loss and in others he has not, and in the case you want to conserve, is that your idea?

Mr. BABBITT. That is it.

The CHAIRMAN. You want to educate the man who runs the mill, is that it?

Mr. BABBITT. Well, to some extent.

The CHAIRMAN. Well, with a man who employs a thousand hands you would not expect to effectuate the same amount of saving as you would these smaller ones?

Mr. BABBITT. No, sir. We are working with the larger mills. There are only a comparatively few large mills, and more and more there are going to be little mills.

The CHAIRMAN. Would you expect the Government to go out and carry on this educational program?

Mr. BABBITT. No; but we do expect this, Mr. Chairman: There is no other body of existing technicians in the world, none available. We expect them to go to work. You have raised the point. I will go into it in detail.

The CHAIRMAN. I do not want to interrupt you. You are making a very interesting statement.

Mr. BABBITT. May I give it to you? For example, we wanted to determine what the relation was between—supposing that our wood industry, which is one of the largest purchasers of hardwood in the world—wood shaping and wood turning—suppose a man has to make a part of a chair that is 2 inches long. The question is raised, What would happen if he had worked to a standard specification that we have worked out and determined?

We find that if you vary as much as one thirty-second of an inch in the width of the size of the knife that cuts off that article it would be liable and frequently does, by taking off a certain amount of material to work on, make a loss of 30 and as high as 50 per cent. In order to prevent that waste we have the knife association to work with us on that project and now we have worked out and are about to publish a chart that every man who runs a wood lathe in the industry, we can tell him how, and then he can look at his chart and get the stuff and work it out so that it will show no waste. It may be a quarter or half an inch or an eighth of an inch on a single stick, but the aggregate runs into an enormous sum.

Mr. JONES. This paragraph 4 provides for the Secretary of Agriculture to conduct experiments and investigations into the methods of utilizing of timber. Is it your idea that that will be utilized in the industry?

Mr. BABBITT. I think it will be utilized both ways.

Mr. JONES. Do you think there will be regulations following that? Or that it will serve merely as a matter of furnishing information to the trade and to the producer as to the best method in handling his products?

Mr. BABBITT. You mean with regard to the use of this investigation?

Mr. JONES. Of the information to be secured by this investigation, if it is worked out.

Mr. BABBITT. That involves questions of law that I can not pass upon.

Mr. JONES. No; I am talking about the policy. Assuming you go ahead and get this information as provided and stipulated in section 4 of this bill, is it your idea that that should be used as a basis for furnishing information, or should it be used as a basis for furnishing regulations requiring operators to follow these models?

Mr. BABBITT. My idea is for an educational campaign. I do not contemplate putting a forester into a wood-turning plant to tell them how to do it. We had experience with that during the war and they certainly bungled things up.

There is another phase of this question. The problems due to inertia. This is largely a matter of psychology, but not entirely so. The great example of the effect of psychological inertia is our own governmental machinery. It is capable of only slight deflections from its established course. But in their lesser

degree, all the units of organized endeavor obey the same law. The fundamental defect in the Capper bill is its failure to take cognizance of this law. That bill, devised by a most eminent forester and splendid American, attempts to take a notorious death curve with its foot on the accelerator. I will return to this matter later and point out exactly what this particular death curve is.

In the project of utilizing the whole harvest crop, consider the long and steady economic and educational pressure that must be exerted just because men are what they are because they have been brought up and equipped with a certain outfit of ideas and their practical applications. Take the lumberman. One group of lumbermen look at a forest and see only so many feet of commercial lumber. Another group sees only so many cords of news print and book print pulpwood. Another sees only so many thousand railway ties. And so on down a long list. The finest of the white oak belt was wasted by taking only the butt cuts of perfect trees to make pipe staves. The problem is no less than this; to fuse all these types in a lumberman who sees in every forest, yes, in each tree, all these natural and necessary products of the forest harvest. I wish I had the time and opportunity to cite examples of the power of this inertia. I take but one.

The CHAIRMAN. They do not do that now, do they?

Mr. BABBITT. They do not do that now, but that is what happened then. The inertia of this thing I want to show you how we have to grow away from what happened in the past. They did that and the oak is gone. The problem, I should say, returning to that, is the choice oak tree, instead of having the choice material for these pipe staves only, it had all these other materials, and they made no attempt to use it.

The CHAIRMAN. I spent several weeks in the forest with an owner and saw no such thing as you mentioned. It was made up into the smallest part, but that was a large mill.

Mr. JONES. What did they do with the sawdust?

The CHAIRMAN. Used it for heat.

Mr. JACOWAY. In those big mills you saw much less waste than in the smaller mills, did you not?

The CHAIRMAN. Yes; but these mills should have the proper equipment and skill back of them.

Mr. BABBITT. Most of the most serious waste you could not see at the mill. Much of it you would see in the woods. It is enormous in crooked logs, short logs, etc.

The CHAIRMAN. Are you familiar with the work they are doing over in Madison?

Mr. BABBITT. Yes, sir. I might say in concluding that I would like to take up this one thing.

The CHAIRMAN. Just go on in your own way.

Mr. BABBITT. Then we have on top of these things the problems due to actual ignorance. Our experience in the war makes it safe to say that ignorance and self-conceit go hand in hand, and like war itself, constitute hell. This reference is applicable to more than the current methods of utilizing the harvest of the forest. Recent investigations of the Forest Products Laboratory show that in so simple a matter as making bent chair backs, one-third of the stock is lost in operation, where the work runs well. Fifty per cent of failures and worse are not uncommon. Yet the Indians before us knew how to make wood bents, you and I as kids knew how to do so. The method has been commercially employed in Europe since before sawmills were invented. Without boasting, any of us here can do better with our bare hands. Yet in commercial practice these failures occur.

Mr. Chairman, my purpose is not to discuss this problem beyond the point of giving you a very clear and definite impression as to the size and importance, immediate and urgent importance of the project referred to in section 4, in order that fabricators and manufacturers and foresters can come together and use this information to put our industry on a par with the woodworking industries on the other side, as to the utilization of everything there is in the tree for the service of humanity.

Now, then, the great service that this investigational work is going to do for us is to meet everything that the Government finds is necessary when they find it necessary to send instructors into our woodworking plants.

As to the practical method of drilling into the forest men these results, we can gear these things into the man who has worked in the woodworking industry and in the forest industry, and we shall have that done as far as we can in

manufacturing the product, so that the hills and valleys of this country shall produce all that the generations in the days to come may require, that they shall make them the most comfortably (as we are now) housed and homed people in the world, because God planted here centuries ago the forests we are using to-day.

The CHAIRMAN. How long would it take you to finish?

Mr. BABBITT. I am done now.

The CHAIRMAN. Tell us something of the accomplishments at Madison.

Mr. BABBITT. The technical work that we have been describing to you to-day has all of it been done in cooperation with the Forest Products Laboratory. Here are some of our publications. For example, they detailed to my office as the chairman of the standardization committee this force of three or four very able men. We put them through a course of instruction as to what the wood-shaping and woodworking industries needed. They went through our own industry, the wood-turning and wood-shaping industry, and conducted a very nice piece of standardization work so that the industry is now operating intelligently and economically. At the present time they are engaged in a similar enterprise for the benefit of the chair industry.

The CHAIRMAN. Do you have reference to Madison?

Mr. BABBITT. Yes, sir. This is work done by the Madison laboratory in cooperation with our organization of wood-using industry. I want to show you how wonderfully we have constructed with those tools you gave us this last year. We have had arrangements made for handling the farm-wagon matter. The work has been delayed of course. That is, we have only got into full swing on account of the fact we had to take some 15 men and teach them how to translate into woodworking language the language of the technical forester and forest engineer. They are taking up the work. When they started in they started in only 10 years old.

They started in on a wonderful series of tests, and then they went on to printing the results of those tests during the war, like solving the spruce problem for airplanes, and then they went into lines in connection with cutting trees in the forests and now one of the main efforts of their organization is the solution which was brought out by the efforts of the wood-using industries to standardize their products so that standard dimensions can be cut in the woods and the whole program in that way put on a scientific basis without any outside interest.

Of course, the study is of vast variety. The work, for example in protecting pulp wood and in showing the values of pulp wood that has been injured, and in attacking the problems that have to do with storing pulp and removal of stains, and work on—I do not know what they call that which lies underneath the lint on cotton seed, but they are trying to utilize that for paper making.

There is a complete standardized statement of our industry [handing the chairman a pamphlet]. We will be glad for you to keep those, except the little photographs.

(Thereupon, the committee adjourned.)

	Per cent.
Of the 100 per cent wood in a tree there is—	
Tops, limbs, stumps	16.6
Bark	10.9
Saw kerf	10.9
Slabs	10
Edgings, trimmings	10
Miscellaneous	2.5
Seasoning	5.6
Lumber	33.5
This 33.5 per cent lumber produces—	
Waste	16.3
Clear cutting	17.2
If the wood in a tree were fully utilized, there would be—	
Stump	5
Seasoning	3
Clear dimension stock	25
Available for pulp or distillation	67

The data from which the above has been constructed has been obtained from the following sources: Publications and unpublished data from the Forest Service, technical investigations by the Forest Products Laboratory, special studies by the technical staff of the National Association of Wood Turners, experience

tables compiled by individuals and associations who are users and producers of lumber, also quite some data which was secured in obtaining a degree from the University of Hard Knocks.

A careful and fairly accurate compilation of all available data bearing on this question of wood waste has been presented. It is to be noted, however, and regretted, that so little has been done in this country to determine and establish the basic data involved in the problems of the conservation of forest products that it is necessary to make note of the fact.

It is assumed that the total content of the tree is 100 per cent. This total is understood to be the practicable total and does not include such items as leaves, underground growths, etc. The studies of the Forest Service are followed as to the content of this practicable 100 per cent. The lumber wastes are taken from experience data of the National Association of Wood Turners, also the totals for salvage from slabs, edgings, and short or crooked logs. The total theoretical salvage possibilities were worked out entirely from basic data analytically derived, but carefully checked from laboratory as well as commercial operations.

SUPPLEMENTARY STATEMENT RE THE FOREST PRODUCTS LABORATORY,
MADISON, WIS.

According to official Federal reports, the lumber industry holds first rank among American industries in the number of persons employed and as regards to values added to basic raw materials by labor it holds second place. The data furnished in the main statement of which this statement is a part shows clearly that the forest harvest is an agricultural crop, essentially; that the personnel by which this crop is harvested is at least 80 per cent farm labor, and that to even a greater extent the draft animals employed are secured from the farmers, hired for the logging season.

Notwithstanding the preeminent importance of this bureau of the Department of Agriculture there has been small recognition of its needs and consequent lack of progress. The Forest Products Laboratory is just past its eleventh birthday. But it was only the exigencies of the World War that roused the lumber industry to an appreciation of the substantial achievements of this institution. What is more important, leaders in this industry began to see how practical and powerful an agency this Forest Products Laboratory ought and must be in the great task of "gearing scientific methods of forest harvesting into the established manufacturing routine of the entire group of industries dependent for raw materials on this forest harvest."

Furthermore, the attention of your committee is directed to the fact that the Forest Products Laboratory is itself a pioneering proposition. It was necessary that the first years of its activities should have been devoted to developing the fundamental data and bases for the construction of a sound science and method of thoroughgoing utilization of the forest harvest. This work is far from complete, and must be pushed at greater speed and in wider scope than ever before. Such an increased program is demanded by the new economic situation caused by the new and apparently permanent high levels of transportation costs and wages. Such a program is warranted because the laboratory has trained and developed a large and competent force of specialists as a personnel able to effect practical contacts between scientific research and industrial production methods and practice. By the way, the prohibitive practical defect of the Capper bill as a constructive piece of legislation is to be found in this connection. The Capper bill calls for an enormous personnel to take charge of the practical operations of all the forests. Such a personnel does not exist, and its production and training would undoubtedly require at least a decade of intensive work. The committee is respectfully referred to the entire production program of the Federal Government during the recent war, in support of this contention. In time of peace there is no possible warrant for such a disruptive program as the Capper bill, all the doctrinaires to contrary notwithstanding.

The importance of the work of the Forest Products Laboratory is being increased every year by the steady progress of lumbering operations from the large operation to the portable-mill basis, or in other words, the "farm-lot" basis. Such a change has taken place in the last few years in the writer's State, Indiana. Our State has no considerable forest areas left. Such a progress is hurrying to its goal in the southern pine region for data on which you are referred to the Capper report on forest resources. This inevitable tendency to

nal operations in the harvesting of the forest crop greatly increases both the necessity and difficulty of economic utilization. In most of the forested areas of this United States, the handling of the forest harvest as a farm crop is a present necessity. The direct utility of the Forest Products Laboratory is therefore not to be estimated solely (I would say chiefly) with reference to the lumber industry as now functioning, but also with reference to this prime agricultural necessity.

PROGRAM OF THE FOREST PRODUCTS LABORATORY.

In referring to this program it is not my intention to describe the work of the laboratory, but rather to state briefly and simply what the program now in effect aims to accomplish.

The laboratory has a section devoted to timber mechanics. The job of this section is to be in position to answer every practical question in which the strength of timber is involved, from bridge timbers to chair legs.

Another section is devoted to timber physics. This section has for its job the handling of all practical questions in which the physical properties of wood are involved. The main feature of the work of this section to date is its experimental and practical work in kiln drying. The work done through its school for curing and kiln drying lumber has produced results in practical conservation of the forest harvest of enormous and progressively increasing value.

A third section handles, on the basis of scientific research, broad practical questions which grow out of the critical relation of the pulp and paper industry to the forest question. Its job is to answer not only questions as to the suitability of various woods for pulp but also what practical measures may be commercially practiced that will diminish the demand of this great industry upon the forest harvest. This field of research covers not only such matters as the utilization of mill waste, the deinking of magazines for low-grade stock, but also the utilization of vegetable fibers of many kinds and from many lands.

A fourth section handles problems connected with wood preservation; a fifth section handles the closely connected problems of disease and decay in timber, with reference to the uses to which it is applied. This is the pathology section.

A sixth section, which is bound to experience a large and rapid expansion, is devoted to the problems of utilizing timber, and especially timber waste, by means of the processes of chemistry, such as wood alcohol, turpentine, acetic acid, and a considerable line of economically important by-products.

Without attempting a complete analysis, I may also mention the section of industrial investigations, with which the writer is in continuous contact, as chairman of the committee of standardization of the Association of Wood Using Industries. This section is engaged in most active and effective cooperation with this committee, and with similar committees of the National Lumber Association, National Hardwood Lumber Association, and private interests, in a thoroughgoing foundation work in standardizing the requirements of the wood-fabricating industries, including construction work, so that the proven economies of standard practice may be incorporated into the routine of all industries dependent upon the harvest of the forest. Far-reaching results have already been secured, with a most fruitful outlook for the immediate future.

The forest service will unquestionably submit to the Committee of Agriculture a detailed statement of the activities of the Forest Products Laboratories. This statement is confined to aspects of the laboratory work with which I am personally familiar. I am not competent to pass on the scientific features of their work. But on the basis of practical utility I am very glad to be commissioned by the wood-using industries to convey to your committee our hearty endorsement of this important enterprise.

THE FINANCES OF THE LABORATORY.

The expenditure of the fiscal year 1921 is reported to be \$225,000, approximately. This is something like 40 per cent of the amount said to be devoted to the exploitation of a well-known brand of chewing gum during the same period. The budget allotment for the fiscal year 1922 is \$325,000.

This allotment is inadequate to meet the fast-expanding responsibilities of this branch of the Forest Service, in the mature judgment of many careful students of the situation as developed in 1922. The writer recommends that this sum

be increased to \$400,000, and that your committee make suitable provision for such additional allocation of funds. I present two reasons:

1. The great financial disaster which has befallen the lumber industry is almost entirely traceable to the fact that high freights have destroyed almost completely the value of low-grade lumber, especially in hardwoods. These low grades constitute at least 35 per cent of the entire output of lumber. The most promising measure of relief is offered by the standardization program, which requires the reduction of wastes and defects at the mills and the shipment only of materials fully usable in fabrication. An intensive program in this connection is imperatively demanded to remedy this condition.

2. Suitable provision is not made in the budget for the publication of the invaluable results of laboratory research, and for educational work in connection therewith.

Respectfully submitted.

WILLIAM A. BABBITT,
*Chairman Committee of Standardization,
Association of Wood Using Industries.*

COMMITTEE ON AGRICULTURE,
HOUSE OF REPRESENTATIVES,
Wednesday, January 11, 1922.

The committee met at 10 o'clock a. m., Hon. Gilbert N. Haugen (chairman) presiding.

Present, Messrs. Haugen (chairman), McLaughlin, of Michigan, Purnell, Voigt, McLaughlin, of Nebraska, Tincher, Williams, Sinclair, Thompson, Ger-
nerd Clague, Clarke, Jacoway, Aswell, Kincheloe, Jones and Ten Eyck.

Mr. SNELL. Mr. Chairman I want to present this morning Mr. George W. Sisson, jr., who is an ex-president of the New York State Agricultural Society, and I might say that he is the largest individual farmer in my district, and I am very much interested in his statement.

STATEMENT OF MR. GEORGE W. SISSON, JR., POTSDAM, N. Y.

Mr. Sisson. Mr. Chairman and gentlemen, Mr. Snell has been very kind in introducing me as he has before an agricultural committee. I am a farmer, live on a 600-acre farm, and have for 35 years. However, I am interested in this forestry problem and am interested in it even beyond the confines of my own farm. As it happens, I am also interested in the ownership and handling of Adirondack timberlands. In an experience of over 55 years in our family in this line of endeavor, we have come to know the situation in the forest lands of New York State, their use, their abuse, if you wish, and their development. We are manufacturers of pulp and paper as well.

We have found it vitally necessary to know the condition of our lands, what is growing upon them as to variety, as to quantity, as to availability to our works, and all those things that are comprehended in section 3 of this bill, which provides for a complete survey and inventory of the forest resources of the United States.

It was very apparent in the testimony here on the first day, Mr. Chairman, that there are very wide, and we might say, wild ideas as to the amount of timber standing in the United States to-day. We were in the same condition with respect to our own private holdings and we have spent this year through my son, who was educated as a forester in Cornell University, to take charge of this very matter for ourselves, with his assistants, in making a careful, detailed estimate, survey, classification, and map of every acre of land we have in the Adirondacks that is destined to supply raw material to keep our plant operating. It has been very illuminating. It has been to us a basic necessity to evolve our forestry policy with respect to our own lands. We had no definite policy before. We did not know where we were to cut this year or where we were to cut next year, or how we were to handle these lands, and we have demonstrated in our own experience the absolute necessity of an inventory which would result in a definite plan whereby we could assure the continuity of the growth and use of our raw material. So I wish to emphasize, if you please, the necessity and desirability and practicability of section 3 of the bill which touches upon that very point. I do not think I need to enlarge upon that. It would seem self-evident.

I will say, further, that as a user of forest products, there was an evident tendency in the evidence here yesterday, and perhaps before, to feel that the lumbermen were coming here asking something for themselves. I want to say to you frankly, that I am not coming here as a paper manufacturer asking anything for ourselves. We own our lands. We are operating our mill. We are sustaining a splendid community by the pay roll from our plant. We are willing to get along without any particular regulation, gentlemen, but I have come to appreciate the fact that there is in this country a growing tendency, which is not going to be stopped, for a definition of public interest in many of the things we have heretofore considered absolutely private interests. That being the case, and from the fact that in a sense, in the operation of our business and the operation of our paper plant, we realize that we are servants of the public, I am ready to acknowledge that we owe a community interest in our own town in keeping our industry going, and I can see a public interest growing there which I am ready to recognize, so far as the public will recognize its responsibility in meeting my recognition of my duty to them. It is only on that basis that we are ready to cooperate with the Federal, State, or local government in the handling of what is truly our private property; and just to the extent that the Government or the public desires us to respond, we ask them to respond; that is all. That is a general statement of the way I feel toward this matter.

Another thing, it is true, as you know, that the paper industry is concentrated in the northeastern part of the United States. It is here that the industry started; it is here that tremendous fixed investments have been made in paper mills, and the mills can not follow the forests as the sawmills have done. That is an impracticable economic problem. It can not be done. We are doing a great deal ourselves to perpetuate our supply of raw material. We are employing technical foresters. We are practicing selective and scientific cutting. We are protecting, so far as we can, from fire. In my own State we are getting good cooperation from the State, and we are pursuing every method we know of that we can, under existing statutes, that do not help us in any way as to taxation, to perpetuate the supply of raw material to sustain the fixed investment in our plant and to keep alive the communities which we serve and which are the seats of our operations.

Mr. TEN EyCK. In that connection, you mean that the industry as a whole is doing that and not your own particular industry?

Mr. Sisson. The industry as a whole is doing that all through the Northeastern States. I think in no other section; in fact, I know that in no other section of the country has as much attention, and intelligent attention, been given to this matter, as far as possible under existing circumstances, as has been given for some years by the paper and pulp industry of the northeastern part of the United States.

Mr. McLAUGHLIN of Michigan. You say that the paper mills can not follow the timber as the sawmills did; will you give your reasons for saying that? I think I appreciate some of those reasons, but I would be glad to have your reasons.

Mr. Sisson. The reasons are that it will cost to-day something like thirty or forty thousand dollars of fixed investment per ton of daily product of paper to erect and equip a mill; in other words, a mill producing 100 tons of finished paper a day from pulp produced in its own plant will require about \$4,000,000 investment. You can not pick that up and carry it along as you can a sawmill that costs anywhere from \$10,000 to \$100,000. That is the reason.

The CHAIRMAN. They generally operate on a large scale?

Mr. Sisson. Yes; on a large scale generally, and certainly on a large fixed investment.

The CHAIRMAN. How about the pulpwood in the forests in the far West. Could that be utilized?

Mr. Sisson. Certainly it can be utilized, and it is being utilized.

The CHAIRMAN. But not very largely.

Mr. Sisson. To a growing extent, with, of course, the disadvantage, as has been pointed out with reference to lumber, of a long freight haul of the resulting product to market.

The CHAIRMAN. That is just what I had in mind. Is the freight haul against it?

Mr. Sisson. The freight haul is against it.

The CHAIRMAN. Is that the reason it is not being developed more rapidly?

Mr. Sisson. The freight rate is a little more than 1 cent a pound from coast to coast to-day.

The CHAIRMAN. Then the rate is prohibitive.

Mr. Sisson. It is very disadvantageous.

Mr. Kellogg. And it is not coming.

Mr. Sisson. No; it is not coming.

The CHAIRMAN. There is not much hope then for the development out there.

Mr. Sisson. For the development of paper out there?

The CHAIRMAN. Yes.

Mr. Sisson. Oh, I would not say that. Paper mills have been established and are operating there and are finding their market.

The CHAIRMAN. But on a very small scale.

Mr. Sisson. On a smaller scale than those more advantageously located in the East.

Mr. Aswell. Is the gentleman familiar with the development in the South?

Mr. Sisson. To some extent with certain lines of paper. It is very true that wrapping paper is being made successfully in the South from the southern pine, and that experiments are proving that various kinds of wood can be adapted to the production of various kinds of paper. The great production of paper in which there is more public interest is that of newsprint, and newsprint has not found a raw material which is equal to the spruce or the fir that is now being used for that type of paper, and that raw material is found in the northeast and northwest.

The CHAIRMAN. How does the quality of the pulpwood in the West compare with what you have in the East?

Mr. Sisson. I would say that it fairly compares with it. There is nothing like good, clean spruce pulp to make newsprint paper from.

Mr. McLaughlin of Michigan. There have been a number of appropriations made by this committee authorizing experiments in making paper out of other materials than wood, like corn stalks and straw, and so on. You can tell us, I presume, the measure of success that has been reached with those experiments.

Mr. Sisson. Not in detail, sir. I think it is a commendable thing that research should be carried on to the extent that we should ascertain the availability of any fiber for the production of paper, but I am convinced in my own mind that there is nothing now in sight that can compete with wood fiber in cheapness, in availability and in adaptability for the making of paper, and that the solution of this problem of raw material for paper making for generations and centuries to come is in the careful protection and reforestation of our timber lands, rather than fussing with a whole lot of supposed-to-be schemes for using straw or cornstalks or cotton stalks or what not.

The CHAIRMAN. There is nothing new about the use of straw.

Mr. Sisson. No; and flax straw is talked about and cotton stalks.

The CHAIRMAN. How about cornstalks. That is rather new, is it not?

Mr. Sisson. You can make a coarse wrapping paper out of cornstalks, of course.

The CHAIRMAN. It has not the long fiber, is that it?

Mr. Sisson. Well, I am not a technician, Mr. Chairman.

Mr. JACOWAY. Can they make paper out of all woods?

Mr. Sisson. Probably not out of all woods; but a very great many varieties of woods will make paper of one kind or another, because it simply means fiber, and if you can digest that fiber and work it up through some process or other, using different chemical processes for certain woods and certain mechanical processes for the grinding of the pulp that goes into paper, you can make paper of one kind or another.

Mr. McLaughlin of Michigan. We occasionally read very interesting statements about the amount of wood necessary to be made into paper and the number of acres necessary to contribute that wood in the business of some big daily newspaper. I have seen some statements as to the number of acres that must be cut-over to produce, for instance, the Sunday edition, perhaps, of one of the large city papers. I am thinking that possibly it would bring the matter forcibly to the attention of the country if you could tell us how much destruction of the forest is involved in the publication of a big daily paper.

Mr. Sisson. There is a gentleman sitting here who knows everything about the consumption of pulp wood for the manufacture of newsprint, and I will let Mr. Kellogg, if you please, answer that question. He can answer that a little later or at once, just as you choose.

Mr. Aswell. Let us have the question answered now.

Mr. KELLOGG. The way you figure it is this, Mr. McLaughlin. It is ordinarily calculated that in the production of a ton of newsprint paper, there is required from $1\frac{1}{2}$ to $1\frac{1}{2}$ cords of rough wood, not the peeled wood. That is the basis of your estimate if you want to speculate in that way.

Mr. McLAUGHLIN of Michigan. There is not much speculation about that.

Mr. KELLOGG. But when you come to the question of the number of acres, that is speculation.

Mr. ASWELL. Does a cord of wood weigh a ton?

Mr. KELLOGG. A cord of wood weighs pretty nearly 2 tons; but the way you get at it is this, if you want to figure it in acres: According to such information as we have, based upon forest surveys and timber cruises and things of that sort, the average stand of spruce pulp wood per acre throughout the Northeast on such lands and the average stand of spruce pulp wood in eastern Canada on pulp-wood land is about 5 cords per acre over the entire area. Now, that does not mean at all that there are not a great many selected acres that will produce 10 and 15 and perhaps 20 or 25 cords; but if you are speaking of big areas, you have to use about that stand per acre. We have some newspapers in the United States that use upward of fifty or sixty thousand tons of newsprint paper per year. On the basis of 360 days or 365 days per year, that would mean that those papers use perhaps 150 to 200 tons of paper per day. That is their consumption. In an extreme case, if they use 200 tons of paper in a single day, that would mean two hundred times $1\frac{1}{2}$ or $1\frac{1}{2}$ cords, which would mean about 300 cords of wood that that paper would use in one day, and then if you want to go on and say that the average stand of pulp wood over an entire area like eastern Canada is 5 cords per acre, you will divide your 300 cords of wood by 5, and you will get 60 acres. That is the basis for calculations of that sort.

Mr. TEN EYCK. Does that mean that you cut the ground clear to get 5 cords of wood per acre?

Mr. KELLOGG. Not at all. I said spruce pulp wood.

Mr. TEN EYCK. Is there other wood?

Mr. KELLOGG. There is a good deal of other wood.

Mr. TEN EYCK. That is used for other things?

Mr. KELLOGG. For other things; and there is also considerable balsam fir that is used along with the spruce in the manufacture of pulp and paper, but the backbone of a great deal of the paper industry of the Northeast is spruce, because it is the best material.

Mr. TEN EYCK. I think where the misunderstanding of the public arises is that they believe that you cut this entire acreage clear in order to obtain the pulp wood for paper.

Mr. KELLOGG. In all of eastern Canada, where 80 to 90 per cent of the timberland is in public ownership, belonging to the Provinces of eastern Canada, which never has been in private ownership, by the regulations established there they are not allowed to cut below 8 or 10 inches in diameter. That leaves you something. Then they have the other species in addition to the spruce that are not taken, and that leaves you something.

Mr. McLAUGHLIN of Michigan. They are not allowed to do that in their original cutting off for timber; but is not the cutting of the spruce or the pulp wood permitted later?

Mr. KELLOGG. No, sir; the big pulp and paper companies of eastern Canada, cutting under Dominion leases, particularly in Quebec, which is the seat of the industry, are held to a diameter limit in cutting pulpwood.

Mr. JACOWAY. Can you make paper out of yellow pine?

Mr. KELLOGG. You can make paper out of any wood that grows, and you can make paper of some kind by some kind of a process out of any vegetable fiber. It is a just a question of whether it pays or not.

Mr. JACOWAY. Can you make paper as cheaply out of yellow pine as you can out of spruce?

Mr. KELLOGG. No, sir; not at the present stage of development.

Mr. JACOWAY. What about hardwood. Is not that more difficult?

Mr. KELLOGG. It depends upon the kind of paper. There is a good deal of hardwood being used in the manufacture of some kinds of paper. As I said before, you can make paper out of any vegetable fiber.

Mr. JACOWAY. And at a minimum cost you can make some kind of paper out of all wood that grows.

Mr. KELLOGG. No, sir; not at a minimum cost. Some woods you can work up cheaply, and they are the commercial species we should reproduce for the

paper industry. There are a lot of these other species that we will never use.

Mr. JACOWAY. How about cottonwood?

Mr. KELLOGG. Cottonwood makes very good pulp.

Mr. JACOWAY. Can paper be made chiefly out of cottonwood?

Mr. KELLOGG. Yes, sir; I consider it a very feasible proposition for some types, and cottonwood should be planted for that purpose.

Mr. McLAUGHLIN of Michigan. You spoke of the regulations of the Provinces now in force in Canada on the Crown lands; do you understand that that is a permanent policy?

Mr. KELLOGG. That is a permanent policy adopted by the Dominion Provinces.

Mr. McLAUGHLIN of Michigan. And anything else will never be permitted?

Mr. KELLOGG. So far as I know. We know what they have done so far, and they have been very persistent about it.

Mr. McLAUGHLIN of Michigan. Their idea is to continue that as a permanent policy and not permit the cutting of timber below a certain size?

Mr. KELLOGG. Cutting to a diameter limit is not forestry, necessarily. Cutting to a diameter limit accomplishes certain purposes, but simply cutting to a diameter limit is not forestry. They have not practised forestry as much as they will some day in the Dominion Provinces, because they have not put the investment back into their land in order to practice forestry. They have established a rough-and-ready regulation like the one mentioned, but I am not saying that that is forestry.

Mr. TEN EYCK. Is that a step in the right direction?

Mr. KELLOGG. It has kept a lot of land from being entirely cleared off, but as I understand it, the purpose of the provinces of Canada in setting up those limits in the first place had no reference to forestry. They had the idea that after the pulp companies had cut out, that then maybe the land would be turned over to settlers, because the pulp companies simply got the right to cut, and they wanted something left on the land for the settler to clear off and get a start on. That is the reason they established that diameter limit. It was not forestry that established it. I am not saying it has not helped, but that was not the fundamental purpose.

Mr. McLAUGHLIN of Michigan. Is it true, as a general proposition, that the kind of wood that is best suited to making paper usually grows on the lighter land which is not so good as other land for agricultural purposes?

Mr. KELLOGG. You can not say that as a general statement. It is entirely true that the spruce grows on a great deal of our land in the Adirondacks and the White Mountains and in Maine and in eastern Canada that is of such a rough character that under no circumstances could it be considered possible agricultural land. That does not say that spruce will not grow on good land, because it will; but no forester advocates, as a permanent proposition, the growing of timber on land that will yield a higher return in agriculture, as an economic proposition.

Mr. PURNELL. Is spruce used more than other woods because of the quality of the paper it produces or because of the fact that it is more easily worked up?

Mr. KELLOGG. For both reasons. Spruce is the best pulp wood we have. It works up easily and cheaply. It has a long fiber, it has a good color, does not require any bleaching at all for some purposes, and only easy bleaching for other purposes; it is our best all-around wood to manufacture paper from, and we can reproduce it.

Mr. PURNELL. What is the approximate number of acres of spruce available?

Mr. KELLOGG. Nobody knows. That is the reason we want this forest survey.

Mr. PURNELL. You mean there are no statistics of any kind available?

Mr. KELLOGG. Yes, sir; there are statistics "of any kind." That is exactly what they are.

Mr. PURNELL. It is your judgment, I assume from your statement, that the statistics are not very reliable.

Mr. KELLOGG. No, sir; I have helped to compile some of them and I know they are not.

Mr. JACOWAY. What about cypress?

Mr. KELLOGG. I do not think cypress need be seriously considered in connection with the pulpwood proposition.

Mr. JACOWAY. Can you make paper out of cypress?

Mr. KELLOGG. Cypress is altogether too valuable for other purposes.

Mr. JACOWAY. The cypress refuse is not too valuable.

Mr. KELLOGG. Some of the refuse is not, but I do not want to enter into a long and tedious discussion about using all the waste in the country for manufacturing paper, because it will not be done in that way, and I do not want to take up the time of the committee in discussing it. I would like very much to have Mr. Sisson go ahead with his statement, because I do not want to interrupt him.

Mr. McLAUGHLIN of Michigan. I am sorry Mr. Sisson was interrupted, but your statement has been very interesting, and perhaps an apology is due to him for the interruption.

Mr. KELLOGG. If, after everything is over, you desire any more information about what is used for paper, I am at your service.

Mr. Sisson. Mr. Chairman, I was very glad of the interruption, because you have gotten the facts in the case better than I could have given them. I have nothing further in particular to bring to the attention of the committee. This simply emphasizes my point, that section 3 of this bill is a most important feature. We do need a dependable survey and inventory of what we have—not scraps here and there picked up and put together, but an up-to-date survey of the situation as to our forest resources and their adaptability.

I might point out one thing, so long as you are speaking of the regulations as to cutting in Canada. Why does that interest us? Twenty per cent of the wood used in the United States in the manufacture of paper is imported from other countries, largely, or practically all, from Canada.

Mr. McLAUGHLIN of Michigan. Is there a tariff on it?

Mr. Sisson. There is no tariff on the wood.

Mr. McLAUGHLIN of Michigan. Has there ever been a tariff on it under any of the previous tariff laws?

Mr. Sisson. There has not been any tariff on wood and there is now no tariff on the manufactured wood pulp, and there is no tariff on the print paper. As you know, we are importing nearly 1,000,000 cords of wood, which is about 20 per cent of the consumption.

Mr. McLAUGHLIN of Michigan. You mean the country is importing that?

Mr. Sisson. The country is importing from 800,000 to 1,000,000 cords of wood, according to the condition of the business. Of course, it will not amount to that this year, but it certainly amounted to that much in 1920. This points the facts to you gentlemen that the paper industry as now conducted is dependent for its raw material upon a foreign country. The possibilities are here in northeastern United States, under good forestry conditions and care and under proper taxation laws, to reproduce upon our own lands all the material used to make the paper that the United States needs itself, without being dependent upon a foreign country. I think that is an accepted fact.

Mr. TINCER. Section 3 of this bill authorizes an appropriation of \$3,000,000 for this survey. I take it from some of the testimony that has been given here that it is contemplated that this will be quite a complicated and thorough survey and quite an expensive one to make. Although I may be wrong about it, yet I really suspect that if it would only cost \$3,000,000 to make this survey, the lumber interests and the different organizations would have had this survey made quite a long time ago, and I therefore suppose that the \$3,000,000 authorized in section 3 is just a starter.

Mr. Sisson. I made the statement a little while ago before you came in, Judge Tincer, that in our own particular case we had made a careful survey and estimate of everything we had upon our land by species and location and availability and all that sort of thing.

Mr. TINCER. I suppose the Government has this information accurately as to the public domain.

Mr. Sisson. So far as it is available and exact, it will become a part of this plan.

Mr. TINCER. I was simply wondering then, just what the men who are to do this work are going to survey. They can get all that information from the proper governmental departments so far as the Government lands are concerned, and they can get it from you so far as your lands are concerned. I presume they will spend this \$3,000,000 or such amount as may be necessary in order to get this information concerning the land of men who have not any accurate information about it.

Mr. Sisson. All this matter is under the direction of the Secretary of Agriculture, and I apprehend they would make use of all the dependable infor-

mation that was available and supplement that with actual surveys and inventories where that had not been done. The details of how it would be worked out or just what it would cost I am not prepared to state.

Mr. TINCHER. I wonder if there is any one here connected with the matter that has any information at all, as to how this figure of \$3,000,000 happened to appear in the bill.

Mr. McLAUGHLIN of Michigan. Mr. Tincher, I do not think you will find that any appropriation has been made for the purpose of making such a survey in the national forests; certainly not in recent years.

Mr. TINCHER. I understood from the testimony of the Alaska forester and from the questions I have heretofore asked Mr. Graves, when he was in the Forestry Department, that they had the information so far as it applied to the national forests.

Mr. McLAUGHLIN of Michigan. They may have made a rough estimate, but I doubt very much if the Congress has ever authorized one to be made or provided the money for the making of it.

Mr. JACOWAY. Mr. Graves in his testimony has stated that in the national forest reserves there are so many billion feet of timber of this kind and of that kind, so there must have been some kind of an estimate made.

Mr. McLAUGHLIN of Michigan. Mr. Haugen, you have been on the committee longer than I have. Do you recall any appropriation being made for the ascertaining of this information?

The CHAIRMAN. We have had several analyses and estimates of the amount of timber and so on, but representatives of the Forest Service are here and I take it that they will tell all about that.

Mr. ASWELL. Mr. Kellogg, just what is sulphate pulp?

Mr. KELLOGG. I would rather not get into a technical discussion of that kind, unless it is necessary, but I will say that there are three processes in general use in this country in making what we call chemical pulp.

Mr. ASWELL. I simply wanted to ask if sulphate pulp is what you produce in the Northeast?

Mr. KELLOGG. There are a few plants that produce it in the Northeast. There are some in British Columbia and there are a few in the South. There are three processes of making pulp by chemical means, which means putting the wood into big digesters and cooking it with some kind of a chemical solution. One is the sulphite process, which is mostly an acid material with sulphuric acid in it and other constituents. One is the soda process, in which the cooking material is a caustic solution of some sort, and another is what is called the sulphate process, which is pretty nearly a hybrid between the two. It is one of the three chemical processes.

Mr. ASWELL. Is that process very largely used?

Mr. KELLOGG. It is being used pretty largely in this country now for the production of a very strong wrapping paper. It is an excellent process to apply to some woods that are not very well utilized by the other processes, and it applies to southern pine, if that is what you want to know.

Mr. ASWELL. May I give the committee some information along that line? I have here a letter from Mr. W. H. Sullivan, who is the largest lumber manufacturer in the Southern States, and who lives in Bogalusa, La. I will read from his letter:

"Call your attention to the attached statement showing the production of sulphate pulp in Canada, the Northern States of the United States, and also the Southern States.

"From this statement you will notice that the production of sulphate pulp in the Southern States is almost as large as that of the Northern States.

"Ten years ago there were only two mills in the Southern States producing sulphate pulp. They were the Halifax Paper Co. and the Yellow Pine Pulp & Paper Co., with a total production of approximately 40 tons per day. Now they are producing 510 tons per day."

And then he gives an itemized statement of all the paper being produced by this process in the United States.

Mr. KELLOGG. That is a very interesting statement, sir.

Mr. ASWELL. I would like to put that statement in the record, if I may, Mr. Chairman.

The CHAIRMAN. Without objection, it will be so ordered.

(The statement referred to follows:)

*Sulphate pulp production in the United States and Canada, compiled from
Lockwood's Directory of 1921.*

SOUTHERN UNITED STATES.

	Pounds per 24 hours.
Atlantic Paper & Pulp Corporation, Savannah, Ga.....	120,000
Bogalusa Paper Co. (Inc.), Bogalusa, La.....	140,000
E Z Opener Bag Co. (Taylorville, Ill.), Braithwaite, La.....	50,000
Southern Paper Co. Moss Point, Miss.....	80,000
Champion Fibre Co., Canton, N. C.....	40,000
Halifax Paper Corporation, Roanoke Rapids, N. C.....	50,000
Yellow Pine Paper Mill Co., Orange, Tex.....	60,000
Southern Fibre Co., Portsmouth, Va.....	48,000
Chesapeake Corporation, Westpoint, Va.....	95,000
Pynetree Paper Co., Gordon, Ga.....	40,000
Humber & Roos, Hopewell, Va.....	200,000
Bastrop Pulp & Paper Co., Bastrop, La.....	100,000
Total southern United States.....	1,023,000

NORTHERN UNITED STATES.

Howland Pulp & Paper Corporation, Howland, Me.....	130,000
International Paper Co., Van Buren, Me.....	110,000
Filber Timber Co., Fiber City, Mich.....	80,000
Central Paper Co., Muskegon, Mich.....	30,000
Minnesota & Ontario Paper Co., International Falls, Minn.....	180,000
The Jayne Co., Jayne, Ohio.....	20,000
New York & Pennsylvania Co., (New York Central), Lock Haven, Pa.....	100,000
Parker Young Co. (Mountain Mills Ranch), Mountain Mills, Vt.....	80,000
Thilmany Pulp & Paper Co., Kaukana, Wis.....	80,000
Wausau Sulphate Fibre Co., Mosiree, Wis.....	200,000
Nekoosa-Edwards Paper Co., Nekoosa, Wis.....	60,000
Falls Manufacturing Co., Doonto Falls, Wis.....	40,000
Stevens Point Pulp & Paper Co., Stevens Point, Wis.....	40,000
Total, northern United States.....	1,150,000
Total, United States.....	2,173,000

CANADA.

Pacific Mills (Ltd.), Ocean Falls, British Columbia.....	110,000
Western Canada Pulp & Paper Co., Port Neillon, Howe Sound, British Columbia.....	50,000
Bathurst Lumber Co. (Ltd.), Bathurst, New Brunswick.....	100,000
Clarke Bros. (Ltd.), Bear River, Nova Scotia.....	100,000
Dryden Pulp & Paper Co., Dryden, Ontario.....	120,000
St. Maurice Paper Co., Cape Madeleine, Province of Quebec.....	120,000
Brompton Pulp & Paper Co. (Ltd.), East Ancus, Province of Quebec.....	180,000
Brown Corporation, La Tague, Province of Quebec.....	-----
International Paper Co., Three Rivers, Province of Quebec.....	-----
Wayagamack Pulp & Paper Co., Three River, Province of Quebec.....	400,000
Total, Canada.....	¹ 1,180,000

Mr. KELLOGG. Mr. Chairman, Mr. Snell was called out to another committee meeting and asked me, with your consent, to introduce the witnesses who are to appear.

Mr. TEN EYCK. Before we hear another witness, I would like to ask Mr. Sisson a few questions.

Mr. KELLOGG. I beg your pardon.

Mr. TEN EYCK. I have asked previously of different witnesses from different States, Wisconsin, California, and so on, what their respective States were do-

¹ Exclusive International Paper Co. and Brown Corporation.

ing now, and the amount of money they are spending and what organization they have as a State to cooperate with the various industries and foresters. Will you kindly tell us, in a few words, what New York State is doing as to fire protection, reforestation, and with regard to making a survey of the present forests in the State, and the amount of money that the State is spending along each one of those lines.

Mr. Sisson. Mr. Ten Eyck, I would not be able to give you the exact amount expended on those various lines.

Mr. TEN EYCK. Well, approximately.

Mr. Sisson. But I will say this: That the State of New York, through its conservation commission, a very effective department of our State government, is doing a great deal in fire protection in New York State. We have developed a system of lookouts on various hills and mountains with telephone arrangements whereby we have been able to detect fires at their inception, and we have kept down fire losses in a remarkable degree in the past few years.

Mr. TEN EYCK. Is that on State lands?

Mr. Sisson. That is on State lands and within the borders of the blue line, so called, the State park in which there are large private holdings and in which, by the way, all of our holdings happen to lie; so that the fire protection is done in a cooperative way also. We contribute to the work ourselves or supply men for fighting fires. Whenever one occurs the fire warden calls on us and we have to supply the men.

Mr. TEN EYCK. Approximately how much money is spent annually by the State for that purpose?

Mr. Sisson. I can not tell you. I should be able to do so, but I can not.

Mr. TEN EYCK. Do you suppose there is anyone else here from New York State who can give us that information?

Mr. Sisson. Col. Greeley could probably give it, but I can not.

Mr. TEN EYCK. What has your State done toward making a survey of the timber lands?

Mr. Sisson. I do not know that it has done anything as a State except to survey its own lands, and I doubt very much if the State of New York really has that information as to quantity and species and availability for practical use, because New York State's 1,500,000 acres are locked up tight by a constitutional amendment which does not permit the State itself to harvest the crop upon its own lands.

Mr. TEN EYCK. Well, do you not think that the State has done some of that sort of work?

Mr. Sisson. Oh, some of the States have.

Mr. TEN EYCK. Do you not think that it is very valuable information?

Mr. Sisson. They have done very valuable work.

Mr. TEN EYCK. Now, in relation to reforestation, what has the State of New York done along that line?

Mr. Sisson. Well, the State has done quite considerable replanting and reforestation itself, and it has supplied seedlings to private owners for planting. We have a free-seed bill through now, Mr. Ten Eyck, and we have free trees available, I believe, for another season.

Mr. TEN EYCK. Private individuals can obtain those trees also?

Mr. Sisson. Private individuals have obtained some, and some of them have planted trees. They have been reforesting their own lands.

Mr. TEN EYCK. And is there any arrangement for the State to provide small trees annually for that purpose?

Mr. Sisson. I can not say, exactly. There is a record of that. Of course the United States Department of Agriculture has a census of the amount and I think it is considerable.

Mr. TEN EYCK. Well, all I know about what the Federal Government is doing for New York State is that up until 1914 there was an appropriation of \$5,000 a year for assisting New York State with its forest protection, and I had it raised to \$10,000. I do not know what has been done since that time. Has anything been done in the way of fire protection in New York State?

Mr. Sisson. Yes, sir.

Mr. TINCER. I understood you to say that you are supporting the Snell bill and that you are favorable to such legislation?

Mr. Sisson. Yes.

Mr. TINCER. That includes section 3, which provides for a \$3,000,000 appropriation to get a survey. Now, just in your own way, I wish you would say what you would do if this bill were reported out of the committee onto the

floor of the House favorably, and the gentleman from Kentucky, or the gentleman from Texas, or some one else, accused us of starting a proposition that would last for 25 years and would say that it was going to cost all the way from \$3,000,000 to \$5,000,000 per year. Perhaps some of the information the Colonel gave us here the other day in his testimony would help us to some extent in that connection, but we ought to have some pretty definite and accurate information as to the necessity for making this survey, because some one will ask us those questions on the floor if we report this bill.

Mr. Sisson. Well, Judge Tincher, I am sure that that amount was not placed in the bill until after some careful investigation had been made. I think that Mr. Kellogg can tell us how they arrived at the amount of \$3,000,000.

As for myself, I would say that my position on the floor, if I was honored so, would be that it is the foundation of any forestry policy of the United States. I would not enter upon any business unless I knew where I stood, unless I had an inventory of my assets, unless I knew what use to make of them, unless I could get a thorough inventory and be sure of my ground. I would want to know about these lands and the amount of timber on them, what they will produce, and I would want to be familiar with the various essentials of the bill, and know what we have started with, and have a comprehensive and intelligent idea of the bill all of the way through, whether it was going to cost three million or five million dollars. It will be worth the money in this great program that I feel is essential to the future welfare of the United States.

Mr. TINCHER. Then, how are you going to be able to get this information—by a survey of the national forests?

Mr. Sisson. I believe that Mr. Kellogg can answer that question.

Mr. TINCHER. Do you not believe that this information is what we should have and that the legislation that we should enact should be deferred until we get that information?

Mr. Sisson. I will ask Mr. Kellogg to answer the question.

Mr. KELLOGG. Mr. Chairman, there are three types of appropriations provided for in the bill. The first is the appropriation for cooperating with the States for fire protection. The next is the appropriation for forest restoration. Section 4 provides a sum of \$1,000,000 to enable the Secretary of Agriculture to conduct experiments and investigations in reforestation and methods of cutting and utilizing timber.

Those appropriations are to continue until the job is done.

The CHAIRMAN. There is an appropriation provided for under section 6 also.

Mr. KELLOGG. Yes; I said there were three types. Getting back to these particular appropriations, you could appropriate to take care of them just the same as you are now getting that done.

This appropriation here was originally drawn as an appropriation for a certain sum of money, to be carried year after year. As the bill has been redrafted it makes that money available until expended and relieves the Forest Service of the necessity of coming here year after year and asking for an appropriation for this work.

That is a good feature of this bill, the way it is drawn, and it makes this money available in a lump sum, \$3,000,000, and the money is to be available until it is expended, until the work is accomplished. Now, that is one of the important features of this bill.

Mr. ASWELL. Three million dollars every year?

Mr. KELLOGG. No, sir; \$3,000,000 to complete the job. The money is made available until the work is done.

Mr. ASWELL. You would have to get through with that then?

Mr. KELLOGG. That is true.

Mr. JONES. Do you agree with the man ahead of you that the information is essential?

Mr. KELLOGG. Yes; I say that it is essential for a permanent forestry program and we have got to have it.

Mr. JONES. Would it not be better not to make an appropriation until we could get that information?

Mr. KELLOGG. No, sir; that would simply defer the situation.

Mr. JONES. I understood that in his discussion he said just previous to the time that you started, that he would not want to start out on a proposition of this kind until he had an inventory. Do you disagree with him?

Mr. KELLOGG. No; I do not disagree with him at all. This information is very necessary and it is the foundation on which to carry out a permanent long-time policy as to reforestation.

Mr. JONES. I beg your pardon, but he said that he would want that information before he started.

Mr. KELLOGG. Well, if he and I are in conflict, I believe that it would be very easy to explain. We may be in conflict as to the terms, but we are not disagreed as to the necessity for this.

Mr. JONES. That may be true, but now the Government is to survey all of the private lands of every character along with the public lands of the State and the Nation under this appropriation for this survey.

Mr. KELLOGG. We are working toward a program of making all of the forest lands of the United States, some 400,000,000 acres, continue in the production of forests, regardless of the owners or who the land might belong to.

Mr. JONES. You will cover all of the lands regardless of where they are located?

Mr. KELLOGG. You do not have to survey all of the timber lands.

Mr. JONES. Now, here is the point I am bringing up: Is it the intention under this paragraph to go ahead and make a survey of all of the land even though the States may have made surveys, or even though individuals may have made surveys, and are in a position to furnish them to the Government, and would you disregard all of that and go ahead and carry out this survey?

Mr. KELLOGG. No, sir. If we could get this information where it has been obtained by the States, or by individuals, we would be glad to accept it.

Mr. JONES. I know of some other cases where there have been Government surveys where they have disregarded what the States have done, disregarded the State information and information which individuals were able to furnish them and gone ahead and made their own surveys, doing the same thing over again, and duplicating that work, because they said they wanted first-hand information, and they would not accept information furnished by other men.

Mr. KELLOGG. No; we are not in favor of doing that. If we are able to get the information we will accept it. We pay taxes—that is, we pay our share and we do not want to pay for having any work duplicated. We are going to take any available information in that way that we can get.

Mr. JONES. That system has been followed out in some other matters.

Mr. KELLOGG. We are not advocating anything of that kind. If we can get the information from any other source, we want to accept it.

Mr. TEN EYCK. Would it not be better that a paragraph be added containing a provision that when the survey is made that all the existing available data and accurate information be used and made a part of the survey?

Mr. KELLOGG. Supplement the State and individual surveys?

Mr. TEN EYCK. Yes.

Mr. KELLOGG. If you will write that in the bill, we have no objection to it.

Mr. PURNELL. What percentage of that information is available?

Mr. KELLOGG. I can not say as to what percentage of it is available. That that is available is largely estimated to-day, and in some sections of the country they have very good data, and in other sections they have not.

Mr. PURNELL. There are some States—Eastern States—that have pretty good data?

Mr. KELLOGG. There is no State that has complete, accurate information, but there are very many individual owners like Mr. Sisson that could give us information. We could accept that information if they would turn it over to us.

Mr. PURNELL. Then, you would accept any information of that nature that could be given you?

Mr. KELLOGG. Yes; most certainly. We would be mighty glad to accept it.

Mr. PURNELL. Would that information be complete?

Mr. KELLOGG. Is that information complete?

Mr. PURNELL. Yes.

Mr. KELLOGG. No; but it would help us to get complete information. We will have prepared, if you wish, a statement as to how the work is proposed to be done; we can arrange to give you that.

Mr. PURNELL. Do you think that you can secure that information on the \$3,000,000 that you are asking to be authorized here, supplement that information?

Mr. KELLOGG. I think that for \$3,000,000 we can get sufficiently complete and accurate information for the purposes of this bill.

Mr. JONES. Do you not think that the State foresters of every State in the country can furnish you the essential information in the shape that you can use it so far as a survey is concerned? In the different States where there

is any appreciable amount of forests would you not think that the State forester could furnish you all of the essential information? You do not have to know the number of acres exactly—exactly the number of feet—but it seems to me that the State forester in each State where there is any appreciable amount of forest would have enough information as to the amount of forest lands and the amount of lands that are subject to reforestation, and they could furnish that information for your people.

Mr. KELLOGG. The State foresters are very sadly lacking in that respect themselves at the present time. Most of the States foresters have not been receiving sufficient money or funds or have not been able to make an inventory of their own State.

Sixteen years ago I appeared before the Committee on the Census of the House of Representatives and tried to get them to incorporate in the census act at that time a provision for making a survey. They failed to include it and we have had the matter up since that time. We still insist that this survey is essential.

Mr. JONES. On public lands and the lands of the States it seems to me that the States, without any great amount of expenditure, would be able to furnish this information. They have the lands classified pretty generally—the public lands—as to the amount of timberland and the amount of agricultural land.

Mr. KELLOGG. The classification of the lands does not meet the necessity. That does not give us the information as to the kind, quantity, and character of timber.

Mr. JONES. Do you mean to say that the foresters of the different States do not know pretty well the amount of forest land that there is in their State?

Mr. KELLOGG. Absolutely. I mean to say that they are not in position to furnish that information.

Mr. JONES. And they are not able to give you the character of land, whether timber land or agricultural land, or some other kind of land?

Mr. KELLOGG. They are not able to give us the information as to the character of the land.

Mr. JONES. What information do they have, if they do not know in a general way the amount of forestry lands, the kind of timber, and the amount of timber on the State or public lands?

Mr. KELLOGG. I know your State forester very well. I know that he is a very fine man, capable man, and knows his business, but if you would ask him if he could give you that information for the State of Texas, I am pretty sure that he could not.

Mr. JONES. Why could he not?

Mr. KELLOGG. Because the State of Texas has not afforded him the facilities to get that information, and as a result he has not gotten it.

Mr. JONES. Well, now, do you mean to say that you are going to go out and get the exact number of acres and the amount of lumber in feet that is available?

Mr. KELLOGG. Nobody is advocating getting the exact amount. We propose to get approximately the amount; but this is the basis of a permanent policy in the development of the forest lands in this country.

Mr. JONES. Now, I am asking for information. It just occurred to me that it would not be necessary for you to make an accurate survey and I ask if you had the amount of forest lands, the amount of lands with standing timber, if estimates could be made, and that you could determine what timber you have and as to what timber would be produced. They could give you that information if it is available now as to the number of acres of timber in a general way, and the amount that has been cut over and subject to reforestation.

Mr. KELLOGG. That is what we want.

Mr. JONES. That could be had without an actual survey of the land, an actual survey of the ground.

Mr. KELLOGG. We want that. We want that embraced in the bill, and if you can tell us any way that that can be done without somebody working on the job, we would be very glad to have that information.

Mr. KINCHELOE. Do you not think that the State forester of every State has an idea and knows pretty generally the amount of timber that is of commercial value in each State?

Mr. KELLOGG. He has an idea.

Mr. KINCHELOE. And then he knows approximately the number of acres that are available for reforestation. They know that in every State, the character of timber that would be best suited for planting in that State for reforestation.

Mr. KELLOGG. He has a very vague idea. He does not have exact information. The reason they do not have that information is because the States, like Mr. Jones's State, have failed to provide for that.

Mr. KINCHELOE. Well, I will tell you what I can do. I can take a 2-cent postage stamp and I can write down to Frankfort, Ky., to my State forester, and get more information than I would be able to get in six months from anybody in Washington.

Mr. KELLOGG. And I will guarantee you that for a permanent timber policy you would get just about 2 cents' worth of information.

Mr. KINCHELOE. I will tell you what I will do. I will write down there and submit the information to the committee.

Mr. KELLOGG. I wish you would write. I wish that everyone of you would write to your State forester.

The CHAIRMAN. That information has been given here once before as to the number of acres covered in the forestry lands, and the number in the different States, that has been incorporated in forestry land.

Mr. KELLOGG. Those are matters of record.

Mr. KINCHELOE. We have been given the amount of timber that was cut last year, and you have given us the number of feet that were cut during the year in California and in other States, the number and amount of timber that was burned, the amount that was cut and the amount that was cut by your association, and the percentage, the number of acres; and I assume that the information is accurate, and that is an accurate percentage. That shows the acreage that has been cut every year and the amount that has been cut for a number of years and the ratio to which that would have to be reforested in order to take care of the forests.

Now, that shows the kind of timber necessary for a supply for this country.

Now, what additional information do we need in order to arrive at a policy? Of course, if we were going to sell the land we would have to have a survey.

Mr. KELLOGG. That is exactly what I am trying to tell you. We have been giving this committee the best information that we possess up to the present time. We have given it to you with the statement that we know that it is not good, and that it is not accurate, but we are giving it to you as the best we have, for what it is worth.

We know pretty accurately—and I organized that work myself for the Government some seventeen years ago—how much lumber is being sawed each year, and we have had that information since that time. We know that and it has been made public. We know how many acres that the States possess. Those are matters of public record. We know, in a very general way, how many acres of forest land that there is, both in the State forests and in the national forests.

The CHAIRMAN. Tell us how that can be improved.

Mr. KELLOGG. There is one way in which that can be improved and that is the method proposed by this bill.

The CHAIRMAN. What do you propose to do to improve that? What do you propose to do?

Mr. KELLOGG. All right, sir; suppose you owned a piece of timberland out in Wisconsin.

The CHAIRMAN. Yes; what would you do with that?

Mr. KELLOGG. If you had made a survey the same as Mr. Slisson has, we would accept that.

The CHAIRMAN. What kind of a survey do you propose to make?

Mr. KELLOGG. We would take that information as to that timber if we could get it.

The CHAIRMAN. What information are you going to get? That is what I want to know.

Mr. KELLOGG. We are going to find out whether the information is sufficient.

The CHAIRMAN. How are you going to find out?

Mr. KELLOGG. We are going to write and ask the States and the owners if surveys have been made, and we are going to check them over and see how many of those surveys are accurate and will give us the information.

The CHAIRMAN. Then, if you have the information that you want, it will not be necessary for you to go any further in the classification of this land to ascertain the facts?

Mr. KELLOGG. They have not got the facts accurately.

The CHAIRMAN. What are you going to do? Send a cruiser out there to examine the land and forest?

Mr. KELLOGG. If you were going to establish or obtain an accurate estimate, you would have to send a cruiser there.

The CHAIRMAN. But this committee is entitled to know something about the plan and what you propose to do with this money?

Mr. KELLOGG. I am trying my best to tell you that.

The CHAIRMAN. Thank you.

Mr. KELLOGG. If you get an accurate survey, and the kind that any good business man would want if he were buying the timber, and such as Mr. Sisson would want, you would have to make the survey, Mr. Chairman.

The CHAIRMAN. Yes; and a business man would want to know how you are going to spend this money and what it is to be expended for.

Mr. KELLOGG. If you will give me a chance I will tell you.

The CHAIRMAN. Tell us what you would do.

Mr. KELLOGG. I would say that if you had your own land cruised, then you would know that you have so many million feet of pine, so much of hemlock, so much of birch, and so much of maple, and you would know how many million feet of all other kinds of timber you have. The department could assemble such information from all owners, check it up, and compile a good estimate for the country.

The CHAIRMAN. Now, you say if you got that, that that would be the information you require?

Mr. KELLOGG. Yes, sir.

The CHAIRMAN. But how are you going to learn that unless you send a cruiser out there for the purpose of going over the area?

Mr. KELLOGG. There will be some areas possibly, in which some little cruising will have to be worked out in cooperation with the State authorities.

Mr. ASWELL. If the timber owner or the State has not got that information, what will you do?

Mr. KELLOGG. If they do not have the information it may be necessary that we get somebody to make an estimate, get a cruiser to go over the land.

Mr. ASWELL. Have you got men in the States that can do that?

Mr. KELLOGG. Oh, yes. As a matter of fact, that is the only way to do it in a large tract. Large tracts make it necessary. These things are relative.

The CHAIRMAN. That is necessary on the large tracts? You think that would be necessary particularly on the large tract? What about the smaller tracts?

Mr. KELLOGG. That could be handled in the same way.

The CHAIRMAN. You would have to go into every forest?

Mr. KELLOGG. Not unless the information was not available.

The CHAIRMAN. Let us know something about your policy, what you are going to do if this bill is passed.

Mr. KELLOGG. This is the plan that we will work out in cooperation with the State and local people, Mr. Chairman, the State forester. The State forester will let us know—

The CHAIRMAN (interposing). I would like you to tell us about your policy; how you are going to expend the money. That is the question.

Mr. KELLOGG. I will tell you exactly what I would do if I had the job—and I do not want the job, I would not have the job.

Mr. CHAIRMAN. Well somebody will have to take the job. Is there anybody here that can give the facts to the committee?

Mr. KELLOGG. All right; Mr. Sherman can answer that.

STATEMENT OF MR. E. A. SHERMAN, ASSOCIATE FORESTER, DEPARTMENT OF AGRICULTURE, FOREST SERVICE.

The CHAIRMAN. Mr. Sherman, the question is for information to the committee. You have about 1,200 supervisors and foresters in the service. What do they do? Are they making a survey of the forests, or are they not?

Mr. SHERMAN. The Government appropriates each year approximately \$100,000 for survey purposes. Of that, about \$35,000 a year is used in the estimating of the forage in grazing surveys, and \$65,000 is used in timber surveys. This amount is only sufficient to keep up with the current timber sales, from which we receive approximately \$2,000,000 a year.

So far as making progress to determine the total amount of timber that we have in our forests, the \$100,000 a year is not available. It handles the specified areas and applies to the timber that is sold. To-day we have no actual accurate knowledge as to the amount of timber in America.

Mr. TINCHER. Sixty-five thousand dollars is required to make this survey of the timbers used, Government sales on national forests, is that it?

Mr. SHERMAN. Yes, sir.

Mr. TINCHER. Now, based on that, it would take about \$650,000.000 to make this survey, instead of \$3,000,000?

Mr. SHERMAN. No; we are not going to sell this timber. If we were going to sell it we would have to go on the land and ascertain the amount of timber. If we were going to sell it we would want to get such accurate information. Accurate information of that nature, that would enable us to sell, costs a considerable amount of money. You will remember that Congress, the Senate, called upon the Department of Agriculture to furnish so much of this information as we could, as had been secured under this appropriation. That was Senate resolution 311, introduced by Senator Capper. We furnished the most accurate report that was available at that time from the source from which we could get information. The source that was available was to communicate with all of the foresters and get all of the information that they had and submit that, but we did that with the statement that it was very inadequate and very defective.

Well, our experience at that time led us to believe that with an appropriation of \$3,000,000 available until expended, we could get all of this information in a sufficiently satisfactory and accurate manner to meet our national needs.

The CHAIRMAN. Mr. Sherman, what information have you now as to the national forests? You have about 1,200 of these supervisors and rangers. What information can you get from them as to the available timber?

Mr. SHERMAN. We have from them information as to their best judgment, their best guess, as to the amount of timber on each forest. That, however, is merely a guess.

The CHAIRMAN. Well, that is a pretty reliable guess. They are experienced men?

Mr. SHERMAN. Absolutely not.

The CHAIRMAN. Could you get a better guess, could you get it in any better way by sending out cruisers?

Mr. SHERMAN. Yes, sir; very much better.

The CHAIRMAN. Simply by cruising?

Mr. SHERMAN. You would not require accurate cruising for all of the land, not at all.

The CHAIRMAN. How would you then ascertain the amount of timber?

Mr. SHERMAN. We could check over with the cruisers on specified areas, and then make our estimate of the different classes in the forests, and get very much better information than we have now.

The CHAIRMAN. Just tell us, so that we will have the information in the record—in obtaining this information, to what extent would it be necessary for you to send out cruisers and have them actually cruise?

Mr. SHERMAN. Perhaps 5 per cent; 5 per cent of the area would have to be actually cruised.

The CHAIRMAN. You think that you can make quite an accurate estimate as to the other 95 per cent by doing that?

Mr. SHERMAN. From that we would be able to tell pretty close.

The CHAIRMAN. At the points where you send cruisers, that is where you have sold the timber?

Mr. SHERMAN. Those have been specified areas, specific areas of timber that have been sold.

The CHAIRMAN. Could you reach a conclusion from that?

Mr. SHERMAN. No; we could not.

Mr. ASWELL. Have you sold 5 per cent of your holdings?

Mr. SHERMAN. No, sir.

Mr. ASWELL. Then, if you had sold 5 per cent you would know pretty well about the forests?

Mr. SHERMAN. No; we would not know by that.

Mr. ASWELL. I understood that if you cruised 5 per cent you would be able to make a pretty accurate estimate.

Mr. SHERMAN. Even though we had sold 5 per cent, that would not give us the kind of information that is needed; 5 per cent of the national forests. That might be two or three parties and it would not give us any idea or any check upon what we would have to have.

Mr. ASWELL. What information have you now as to the privately owned timberlands?

Mr. SHERMAN. We simply have their guess, or the estimate of the forestry schools and State foresters and forestry associations and the lumbermen. That is all we have been able to get.

Mr. ASWELL. Do you agree with what was said as to the State forester knowing very little about this?

Mr. SHERMAN. Very little.

Mr. ASWELL. What value would you attach to their reports, the estimates?

Mr. SHERMAN. Oh, I would attach more value to their estimates than I would to anybody else's.

Mr. ASWELL. Some of the timber people have pretty accurate information.

Mr. SHERMAN. No, sir. They have pretty accurate information as to their own holdings and very often they are not willing to give that information to anybody else.

Mr. ASWELL. Well, would they not be willing to give it to you?

Mr. SHERMAN. I think that they would give it to us in confidence. We very frequently obtain it and very often the estimates are made, and they know just what amount or how much of timber there is on their lands.

Mr. ASWELL. The lumber people own most of the timberlands?

Mr. SHERMAN. Yes, sir.

Mr. ASWELL. Well, then, you would have it right there.

Mr. SHERMAN. But we do not have a right to use that.

Mr. ASWELL. Well, you could ask them for it.

Mr. SHERMAN. They will tell us, give us the information they have and very frequently we will have to send a man out there and make a check cruise on that, on certain areas, to determine whether that is a selling estimate or a buying estimate, or whether that estimate is based both upon a selling and a buying estimate.

Mr. ASWELL. The lumber people have more accurate information than the Government.

Mr. SHERMAN. I beg your pardon?

Mr. ASWELL. Is it not reasonable to suppose that the lumber people, in many instances in this timber, would be more accurate than even the Government itself?

Mr. SHERMAN. They will probably know, but, as I say, they will not always tell us.

Mr. ASWELL. But you say they will give it to you in confidence.

Mr. SHERMAN. In very many cases, but we do not know whether that is the information that we want or whether that is based on the information that they are ready to pass out to the public. We would have to make an investigation to determine whether or not that was accurate.

Mr. ASWELL. Could it not be written into the law similar to the income tax law?

Mr. SHERMAN. We would have to do a certain amount of checking on it. We would not have to check the entire area.

Mr. ASWELL. Could it not be enacted into legislation to require them to give you, require the owner to give you, that information the same as is done in the income tax law, which requires them to give the information?

Mr. SHERMAN. I do not believe that we would get anywhere with that. They could say that this is the best information we have been able to obtain.

Mr. ASWELL. The Government could promise to properly safeguard that information and obtain that estimate.

Mr. SHERMAN. I think that that could be arranged very well. I think that we could secure a check.

Mr. McLAUGHLIN of Michigan. Is it not true that whenever these estimates are made, they are quite unreliable?

Mr. SHERMAN. Yes, sir.

Mr. McLAUGHLIN of Michigan. You have no doubt talked, as I have, with lumbermen, and they tell me that an estimate is made by the owner of the land who wishes to sell, and the one who is proposing to buy makes an estimate, and there is a wide difference, and later, when the land is cut, the timber is cut and turned into lumber, there will be another result?

Mr. SHERMAN. Yes.

Mr. McLAUGHLIN of Michigan. With a wide variation?

Mr. SHERMAN. A very wide variation.

Mr. McLAUGHLIN of Michigan. There is a wide variation between those amounts, those estimates, and there would be a good deal of speculation after all, at any time that you estimated the amount of timber on any piece of land.

I want to ask just one more question. You spoke of the estimate made, examinations made, of land owned by the Government on which sales of timber are proposed. In making that estimate do your men get any more than the amount of standing timber or the amount proposed to sell; do they get information as to the pulp wood and all kinds of standing timber on the land, or just what you are going to sell?

Mr. SHERMAN. We get information in making our estimates, where we make sales, we get information not only as to the amount and the character of timber to be sold, but also the amount and the character of young growth and the character of the land itself and what we may expect it to do under certain conditions, after the timber is cut.

Let me say right here in this connection, this survey will give us information of a different character than the information lumbermen get for themselves. It is something that is quite different, and essential also, from the mere fact of the amount of merchantable timber on an area.

Our big problem is the problem of growing, producing timber. We want to know not only how many acres of timber and not only how much timber there is, but we want to know whether this timber, young growth, is in a producing condition that will produce timber to-day, or produce a growth to-day that will result in timber for future years, or whether it is nondescript and will not produce merchantable timber, or whether this forest has been burned over and will not produce anything. We want to know also whether this merchantable timber is young stuff and whether it will still continue to grow, or whether it is fully matured and ought to be cut now.

The problem of the Forest Service and the forestry situation is to know and to get more information as to those features in addition to the amount and the value and the character of the standing timber.

Mr. McLAUGHLIN of Michigan. Along the line of the question I was asking you, I was talking to a lumberman a short time ago, who was considering the buying of a certain piece of timber. The estimate of the owner, as I remember, in round figures was 14,000,000 feet. The cruisers put on by the buyer showed that there was about 7,000,000 or 8,000,000 feet. The purchase was made and the land cut over and the production was over 20,000,000. That is why I say that these estimates vary, and after all they are largely guesswork, and there is a great deal of speculation about it.

Mr. SHERMAN. The estimates should come closer together than that.

Mr. TINCHER. That cruiser was working for the purchaser.

Mr. McLAUGHLIN of Michigan. A cruise had been made also by the former owner of the land.

Mr. JACOWAY. May I ask right in that connection whether you think it is absolutely essential for a reasonably accurate estimate and survey before you can determine the national policy, before the Government could fix a general policy?

Mr. SHERMAN. I think that we could fix a general policy without an accurate survey. I think, though, that before you could decide upon the amount or portion of land that the Government or the State, before they can decide upon the amount of land that you would limit to restrictions, that you ought to have this information.

Mr. JACOWAY. Now, is that information necessary before we can fix a policy? Of course, it is evident to you and to all of us that we want to conserve the funds of the Government and avoid any unnecessary expenditure of money in making a useless survey.

Mr. SHERMAN. No; it is not necessary before we fix a policy to get it.

Mr. JACOWAY. It is not?

Mr. SHERMAN. No, sir; it is not necessary in order to fix a policy to-day that we should stop buying or selling or that we should increase probably the whole forests, but until we get this information we can not tell to what extent we should increase the publicly owned forests. We will ultimately ascertain that they should be increased, but whether we should buy 10,000,000 acres or 50,000,000 acres, we do not know. We do not know to what extent to plan for further forests, and we can not tell until we get this accurate information.

Mr. TEN EYCK. You know you have not enough?

Mr. SHERMAN. Yes, sir.

Mr. JACOWAY. You have heard the discussion with regard to cruising this morning. Can you state to the committee how you would cruise in order to get your definite estimate?

Mr. SHERMAN. That would depend upon the purpose for which we were going to make the estimate.

Mr. JACOWAY. To get the information and make this estimate.

Mr. SHERMAN. If I wanted an absolutely accurate estimate of all the timber on the land I would measure every tree. If I wanted a reasonable estimate I would cruise, perhaps cruise the entire area, counting the trees of various diameter and estimating the log lengths, and so on. If I wanted simply a general estimate I would perhaps estimate—

Mr. JACOWAY (interposing). I am speaking of providing an estimate so that you can get absolutely every foot of timber on an acre of land.

Mr. SHERMAN. That kind of an estimate the Forest Service never makes except when it makes a small sale of less than \$100. In that case we would measure every tree and estimate as to the log lengths.

Mr. JACOWAY. You would not measure the height of the tree, of course; you would take that measurement without the height?

Mr. SHERMAN. We would take that from some tables that were made in the various regions. We would not attempt to estimate the height of the trees.

Mr. JACOWAY. Now, do you know what that would cost per acre to make a refined estimate such as that?

Mr. SHERMAN. To make an accurate estimate such as that would cost a great deal. It would probably cost as high as a dollar an acre.

Mr. JACOWAY. A dollar an acre?

Mr. SHERMAN. Yes, sir. We could not dream of making any such a survey as that.

Mr. JACOWAY. Well, in making your survey, what would you make in order to ascertain definitely and intelligently the amount of timber; what would it cost per acre to cruise the land in the United States?

Mr. SHERMAN. That would depend largely upon the land. The cost per acre for cruising all of the land in the United States if we were going out to make an actual cruise, it would cost perhaps 5 cents an acre, but nobody proposes to make an actual cruise of all of the land in the United States.

Mr. JACOWAY. Now, is there any cruiser anywhere that will estimate lands either for buyers or sellers at 5 cents per acre?

Mr. SHERMAN. Yes, sir; lots of them.

Mr. JACOWAY. Where are they?

Mr. SHERMAN. Any cruiser will estimate certain kinds of land for 5 cents per acre. He will not do it in the Douglas fir region of Oregon or Washington. It costs 20 cents per acre there.

Mr. JACOWAY. Well, now, it would take a long time if you are to make an accurate cruise to find the lines and the corners, would it not, Mr. Sherman?

Mr. SHERMAN. It will in some cases.

Mr. JACOWAY. It will take sometimes two or three days to find a single corner where you want to start.

Mr. SHERMAN. I think not for the purpose of this question, ownership not being involved, you will not have to locate any corners at all.

Mr. JACOWAY. Another question. Do you think that the cruisers in the Forest Service are competent to tell how much growing timber is on a given area of land?

Mr. SHERMAN. They are. I am speaking of making examinations; yes, sir.

Mr. JACOWAY. Well, several hundred of those could be put to work at the task.

Mr. SHERMAN. We do not have several hundred cruisers.

Mr. JACOWAY. How many have you?

Mr. SHERMAN. Why, I suppose perhaps a half dozen in each district, reliable cruisers.

Mr. JACOWAY. What would be the total number?

Mr. SHERMAN. Thirty-six.

Mr. JACOWAY. How many acres could a cruiser cruise a day?

Mr. SHERMAN. That depends entirely on the character of the country.

Mr. JACOWAY. But ordinarily?

Mr. SHERMAN. There is not any such a thing as ordinarily, because we will have land, for instance, that men could cover 20,000 acres a day, where it is running uniform, and where there is a small stand. You will have again a case where it will take a man two days to cover a certain section.

Mr. JACOWAY. Well, ordinarily you would step over each 40 acres north and south and east and west how many times?

Mr. SHERMAN. Twice.

Mr. JACOWAY. You would go over it north and south twice and east and west twice?

Mr. SHERMAN. If we were going to make a real cruise, but we are not talking about cruising in this case, except for the purpose of checking.

Mr. JACOWAY. You want to get—want to take a census of all of the timber and know definitely what the resources are, what timber we have; is that correct?

Mr. SHERMAN. Yes, sir; so that there will not be an unreasonable degree of inaccuracy.

Mr. JACOWAY. Now, you are not speaking of making a cruise such as you would make if you were selling or as you would make if you were buying timber?

Mr. SHERMAN. I mean this: I know of a case where a lumber company owned the timber and they sent cruisers in there to cruise that timber regardless of the ownership, and to-day they have prepared blue prints showing their estimate. Their estimates shown from this blue print is just about 50 per cent of what that land actually requires. We have got to go on that land; a man would have to cruise that land. He would not have to make a very close cruise of it, but he would have to cruise it in order to make a check. That would have to be done on certain lands.

Mr. JACOWAY. I understood you to say a moment ago—and I have been somewhat surprised to learn that—that you attached little importance to the estimates and the work of the State foresters. Is it possible that the average State forester, who is presumably devoting time and thinking in terms of forestry, has no information at all that would be available in making a cruise or a survey as to the resources of his own State?

Mr. SHERMAN. Why, he has some information. He has the best information that is available. It is valuable, but he will tell you himself that much of it is only a guess, and that it is very inaccurate. The foresters have not been able to get this information.

Mr. JACOWAY. Well, he has some information?

Mr. SHERMAN. Yes; certainly, and we could build upon that.

Mr. JACOWAY. You have heard some of the witnesses say that they have no information that would be of any use whatever?

Mr. SHERMAN. No accurate information. I do not think they have.

Mr. JACOWAY. Well, you do not think that it is possible to get any very accurate information without a very exhaustive and expensive survey?

Mr. SHERMAN. That depends on what you call very accurate.

Mr. JACOWAY. I call "very accurate" knowing the number of feet of lumber that you can get from any area.

Mr. SHERMAN. Of course, absolute accuracy, even in instruments or measurement, is not humanly attainable.

Mr. McLAUGHLIN of Michigan. If this section 3 is carried on in connection with some other sections it will mean cooperation between the Federal Government and the States and private agencies, to the extent of costing a very large amount of money. The Federal Government might not at this time wish to make that expenditure, but it seems to me that from the amount of land now owned by the Federal Government inside and outside of national forests, all of which could be made available, if not necessary, the amount of land owned by the State could be used for that purpose, that that would be all of the forestry work that would be necessary and could be carried on without the necessity of making a survey of the entire United States.

You may remember that a few years ago the then Secretary of Agriculture, Mr. Wilson, made something of a survey to ascertain the land suitable for growing sugar beets, and he did not go very far, and he did not spend very much money before he found that there was enough acreage, as he himself said, that if one crop of sugar were grown on all of that area that his investigation had covered that sugar enough could be grown, or produced, to make as much as had been used by the people of this world since the birth of Christ. Those were the words of Secretary Wilson.

Mr. SHERMAN. But you can raise timber that way.

Mr. McLAUGHLIN of Michigan. I realize that, but the Secretary investigated only a small area, comparatively a small area.

Mr. SHERMAN. It would take a comparatively small area to produce all of the sugar that we need. It would take a large area, a tremendous area to produce all of the cut timber that we need.

Mr. McLAUGHLIN of Michigan. But when you think of the millions and millions of acres of land owned by the Government that could be made available for the purpose of growing timber and added to that the millions of acres owned by the States, it would seem to me, just at this time, that so far as the Government now being willing to go into this proposition or at any time in the future would be willing to go into it, there are areas enough to produce all of the timber needed and that will be needed to provide a permanent supply of timber. I wonder if it is necessary to make this intensive investigation all over this country.

Mr. SHERMAN. According to the best information obtainable, and which I might say is very inaccurate, our cut of timber is over four times our annual growth, and that represents the annual growth upon our Government lands and upon all of these other lands.

Mr. McLAUGHLIN of Michigan. The annual growth the way we are growing timber at the present time?

Mr. SHERMAN. Yes, sir.

Mr. McLAUGHLIN of Michigan. But if even a small part of the available areas owned by the Government and by the States were devoted to that work, would not the supply that would be coming on be satisfactory in amount and character?

Mr. SHERMAN. I am very sure that it would not. I am very certain that we can not produce from the Government-owned lands and from the private-owned lands, under the present economic condition, the timber that this country will absolutely need. Eventually we must grow our own timber or import it. We can not depend upon our supply being inexhaustible. The question was asked here the other day about allowing the lumber industry itself to restrict the cut. And I know that there ran through me a shudder in apprehension as to what would happen to the consumer if the industry did restrict the cut, even with our power to draw upon foreign countries for our supply.

Now, eventually the cut must be restricted, and will be restricted to our annual growth, which is one-fourth of our present annual cut. Then, what will happen to the consumer unless that annual growth is increased beyond what it is at the present time. I do not know.

Mr. McLAUGHLIN of Michigan. There is a very large area in the national forests that could be reforested and that is not being used at all and there are similar lands that are in the public domain outside of the national forests. Much of that land is exactly the same as the land within the forests and could be made available.

Mr. SHERMAN. But it is not being made available.

Mr. McLAUGHLIN of Michigan. It would not take this intensive survey to ascertain all of the area that is available. It would take a simple law to require that to be devoted to that purpose.

Mr. SHERMAN. No; that could be done immediately and should be done immediately. The remaining public land unsuited for agriculture and suited for timber production should be put to that use on forest reserves. It is not being done.

Mr. McLAUGHLIN of Michigan. On the other hand, the story is current that the Secretary of the Interior wishes all of the forest lands now taken out of the Forestry Service and out of the control of the Department of Agriculture, and added to the public domain, so-called, owned by and administered by the Interior Department. That might stop any forestry work in areas where that work is now carried on and contemplated.

Mr. SHERMAN. Let us hope for the good of the country that it would result in more work being carried on and better and more harmoniously than at the present time, if such a thing should be done.

Mr. McLAUGHLIN of Michigan. Do you think that the idea of anyone in proposing that that be made, that you take that land and transfer it from the Department of Agriculture to the Department of the Interior, would have the purpose of carrying better and a more comprehensive system of forestry?

Mr. SHERMAN. Personally, I doubt it, but let us hope for the good of the country that if such a thing were done that even a better system would be carried on than is carried on now.

Mr. TINCHER. I read that in the paper and introduced a bill along that line that the Interior Department transfer to the Department of Agriculture the land that they now have jurisdiction over, and I serve notice now that I shall call that bill up at some time in the near future.

Mr. TEN EYCK. Will you kindly state to the committee what percentage of the Government owned land information is now in the files of the Government as regards the class of survey that the intent of this bill will carry out?

Mr. SHERMAN. I suppose 3 or 4 per cent.

Mr. TEN EYCK. Three or four per cent.

Mr. SHERMAN. That would be for anywhere from four and a half to six million acres. There may be more than that. That is a rough guess.

Mr. TEN EYCK. Will you also tell the committee as regards your fire protection? What percentage of the entire holdings of the Federal Government is now protected—properly protected—from devastation by fire?

Mr. SHERMAN. Properly protected—"properly" is a rather difficult term to define.

Mr. TEN EYCK. Well, explain it in your own words.

Mr. SHERMAN. At the present time all of the land inside of the national forests are being fairly well protected from fire. That amounts to 156,000,000 acres.

Mr. TEN EYCK. Well, what percentage is that of the whole?

Mr. SHERMAN. And the unreserved public lands are not being protected at all.

Mr. TEN EYCK. Well, what percentage is that?

Mr. SHERMAN. Nobody knows the acreage of the unreserved public lands that are suitable for timber production so that I can not tell what the percentages are. The Government does not have that information available.

Mr. TEN EYCK. Well, now, will you tell the committee what percentage of the Government lands are being reforested annually?

Mr. SHERMAN. The percentage is so small, if you try to run it out into percentage that it is ridiculous. The total fund, as I remember it, for planting is approximately \$100,000. It costs you about \$10 an acre to plant. That would plant about 10,000 acres a year. Our national forest area is 156,000,000 acres, so that the percentage is very trivial.

Mr. TEN EYCK. Have you any information as to how much is being reforested now by planting trees, and is annually being reforested by the seed trees?

Mr. SHERMAN. No; not as to the percentages. We know that protection against fire results in trees coming in many places, but to determine the percentage on that could not be done. We have no information on that.

Mr. TEN EYCK. And have you any information with regard to reforestation in that way?

Mr. SHERMAN. Oh, we feel that is the most practical way to reforest, by protecting areas against fire, that we should accomplish more in that way than could be done in any other way.

Mr. TEN EYCK. It could not be done in that way unless there were seed trees there to furnish the seed?

Mr. SHERMAN. Well, the foresters are being careful to protect the seed trees.

Mr. TEN EYCK. Well, what are you doing to see that the seed trees are located properly and are properly protected?

Mr. SHERMAN. We see that those trees are not destroyed. That is the main thing. Tree planting is very expensive.

Mr. TEN EYCK. Planting is very expensive?

Mr. SHERMAN. Yes, sir; and the easiest way to get reforestation is to prevent destruction and safeguard the area against fire.

Mr. TEN EYCK. Yes. But you could prevent a fire in a place where there are no seed trees, and you would never get anywhere by just merely keeping the ground from burning over?

Mr. SHERMAN. There might be a quarter of a section where trees entirely surround the area, or a section, and they would close in. It is a question of time, but, of course, when we sell the timber and the timber is cut off, we are very careful to see that seed trees are left.

Mr. TEN EYCK. That takes hundreds of years to accomplish that?

Mr. SHERMAN. It will close in eventually. It will take hundreds of years, but this is a hundreds-of-years proposition and I think we can do more toward getting the land in trees and get more acres in trees that way per dollar per area expended than any other way.

Now, let me say just a word about this \$3,000,000. When we had to prepare the information called for in the Capper report our experience in that matter indicated to us that with a fund of this amount we could, within a

reasonable length of time; get sufficiently accurate information to meet the needs of Congress and meet the public demands and that work can be done with that fund, and I think that it should not require any additional amount. In fact, we ought to set out to accomplish it with the \$3,000,000. If we want a \$3,000,000 job we can do it. If we want a \$10,000,000 survey it could be made more refined, but it would not be advisable.

Mr. TEN EYCK. You believe this survey should be carried on simultaneously on the public-owned lands and the private-owned lands and that the Government should carry on all of that work?

Mr. SHERMAN. I think that it should be carried on at the same time that the data should be collected, all information from all sources to get it as intelligently as possible.

Mr. TEN EYCK. What is your idea as regards the reforestation of public lands in comparison with privately owned lands. As regards Government lands, should the Government take their own lands first and reforest them, or do you think it would be more advisable to work with the private owners and reforest their lands first?

Mr. SHERMAN. I would say, since it costs \$10 per acre to plant the trees if by the expenditure of 5 cents per annum we could get somebody else to plant an acre of land that it would be a good investment, be better than to plant it ourselves.

Mr. TINCHER. I understood you to say that there were 156,000,000 acres in the national forests?

Mr. SHERMAN. Yes, sir.

Mr. TINCHER. About how many acres have you sold?

Mr. SHERMAN. We do not sell any lands.

Mr. TINCHER. I understand that.

Mr. SHERMAN. We sell only timber, and our sales run to about 1,000,000,000 feet.

Mr. TINCHER. About how many acres do you estimate that would be?

Mr. SHERMAN. That would cover about 100,000 acres.

Mr. TINCHER. And that would be less than 1 per cent of the total land?

Mr. SHERMAN. That would be less than one-tenth of 1 per cent.

Mr. TINCHER. And you are spending \$65,000 a year on a survey which, according to the language of this bill, is not to be compared with the survey contemplated in this bill in section 3.

Now, the Government land, as I understood the colonel the other day, the Government forests, are about 17 per cent of the total forests. So that while my statement that section 3 would call for \$650,000,000 instead of \$3,000,000 might seem ridiculous at first, it is not out of accord with those figures if you make the same kind of a survey on all of the forests that you make with the \$65,000 a year you now have and are making on that portion of the national forests you are selling. If you make that kind of a survey under this bill it will take \$650,000,000 to make the survey and give you the information that you want concerning that, and I submit that that is included in the language of this bill.

Mr. SHERMAN. Nobody is contemplating making any such a survey as that.

Mr. TINCHER. I understand that, but I submit that the language of this bill, section 3, authorizes the Secretary of Agriculture, through the Forest Service and in cooperation with the various State organizations of timber users, owners of timberlands, and other agencies, to make that survey. There are those separate propositions, those three things set forth. If the Secretary of Agriculture is authorized by section 3, and there is authorization for an appropriation separately providing an authorization under section 3 to make a survey, and then the proper appropriating committee would authorize the appropriation of \$3,000,000, I say that that contemplates—that the language of the bill contemplates—a more thorough survey than we are discussing now, and a more thorough survey than is made upon the lands now.

Mr. SHERMAN. No; not at all—a more extensive survey, but a much less intensive survey.

Mr. TINCHER. Well, all we can go by, you understand, is the language of the bill put before us, which provides that he is to determine the quantity, location, availability, and suitability for various uses of each class or species of timber; to determine the approximate area, location, condition, and productive capacity of the land chiefly valuable for timber growth.

Now, that is the language of the bill. Now, you are spending \$65,000 a year in the carrying on of surveys that you have described on that portion of the

national forest which is less than one ten-thousandth per cent of the entire forests of this country, for the kind of a survey you contemplate, and then you turn around and ask us to authorize this kind of a survey. I think that this section of the bill merits serious and thorough consideration by the committee.

Mr. SHERMAN. That is quite a different survey from the survey that is made when we are making it for sale purposes. That is a very intensive survey. That kind of a survey could not be made out of these funds. I think that a certain amount of money could be allowed for us to make a survey of sufficient accuracy to meet the practical purposes.

Mr. TINCHER. I was judging from the answers you have made to Mr. McLaughlin, whom I know knows the lumber business, and to Mr. Jacoway, whom I am sure is acquainted with the lumber business. I was judging from the answers to the questions which you were asked by them that you really contemplated getting more information than was necessary to get concerning the tracts of land that the Government sells timber on.

Mr. TEN EYCK. Do you get all of the information on the land where sale is contemplated?

Mr. SHERMAN. Oh, yes; on the land where the timber is sold we get all of that information.

Mr. TINCHER. Well, where you get that information you get the information with regard to the available timber and you get information with regard to the suitability of that timber for various purposes, but you do not attempt to determine the productive capacity of the land for timber growing?

Mr. SHERMAN. Oh, yes; we certainly do. That is covered. Our reports show that.

Now, this is the kind of a survey that we have to make under the law: When we make a survey for sale purposes under the law we must appraise the timber. There is an appraisal there.

Mr. TINCHER. Section 3, on page 3 of the bill, down to the word "act," is an unlimited authorization or requirement on the part of the Secretary of Agriculture to make a survey, and the terms and what is contemplated is stated, and all he has to do is to make this survey in cooperation with the various States, organizations of timber users, owners of timberlands, and other agencies.

Now, we may just as well understand each other now. This committee understands that portion of section 3, beginning at line 19, "there is hereby authorized to be appropriated \$3,000,000," is in no way a limitation on the Secretary of Agriculture. We understand that, and we had it up here for years and years when we had the appropriation of money ourselves. If we would tell the Secretary of Agriculture to do something, we would have to appropriate money for it from year to year, and now we must authorize the appropriation here for him to carry that out.

A while ago some gentlemen here suggested that you were going to file with the committee a brief statement as to what you really contemplate doing under that portion of section 3. It seems to me that it is a very important question and a big question.

Mr. SHERMAN. That is the intent, to cover the job, to complete the entire job with \$3,000,000.

Mr. TINCHER. I must say that I have listened to the forester's testimony and I have listened to your testimony, and I can not see how you can get any information of any considerable value with \$3,000,000 in addition to what you have done. For instance, now, I suppose that the National Forest Service is in communication with all of the State foresters; at least, there is cooperation between them and the national forester.

For instance, you could take this \$3,000,000 and make your survey of the national forests; this is, of the timber. It might contemplate the purchase of timber or the sale of timber, and it would not be of any value at all. In this proposition you start, and you are going to take \$3,000,000 and get an estimate on 1 per cent instead of 17 per cent, and that is supposed to furnish a basis upon which the Federal Government will establish a policy concerning our national forestry policy?

Mr. SHERMAN. I think that it would be sufficiently accurate. As to individual areas, there would be more or less discrepancy coming up, but it would be sufficiently accurate.

Mr. TINCHER. Of course, when this fund had been expended we would have to make appropriations. This fund could be expended during the first year—this \$3,000,000. It is not a drop in the bucket after we have by this bill

thorized; there is but one course open to Congress then, and that is to authorize further expenditures, because we can not stop in the middle of it. The fact is that we can hardly stop anywhere, whether we have started or not. I do not now of any authorization that Congress has made at any time along this line, no matter how small it was, where we have ever stopped.

Mr. SHERMAN. Let me make this statement: According to our best judgment, the job could be done satisfactorily for \$3,000,000. It could be planned upon the basis to be completed within that limit; and if the committee desired to put in such a limitation, or such a restriction, on the Secretary of Agriculture as to this work, I would see no objection to that, because that is the purpose and the intention of the Forest Service.

Mr. TINCHER. Do you know of any work of any kind anywhere that has ever been authorized that was ever finished or finished anywhere near the limitations and estimates submitted?

Mr. SHERMAN. Yes; I think there have been remote cases of that kind. I do not recall any at the present time.

Mr. TINCHER. Well, I think that it is rather patent right on the face of this proposition that if you are going to do that line of work that \$3,000,000 is wholly inadequate.

Mr. SHERMAN. I will mention one item that was completed for less than was contemplated, cost much less than was estimated. That was the classification of lands in the national forests suitable for agricultural purposes.

Mr. KINCHELOE. Let me ask one question. I believe that we are all agreed that there are about 156,000,000 acres of land in the national forests. Do you know the approximate number of acres that are suitable for reforestation in the various States in the Union?

Mr. SHERMAN. No.

Mr. KINCHELOE. Do you have any idea about them?

Mr. SHERMAN. About 7,000,000 acres owned by the States.

Mr. KINCHELOE. About 7,000,000 acres. The gentleman from Wisconsin testified here yesterday and said in his judgment if all of the forestry lands suitable for reforestation owned by various States and the Federal Government were intensely reforested, and with sufficient appropriation to protect them from fire, that those lands alone would produce enough timber to supply the wants of the United States. Do you agree with that proposition?

Mr. SHERMAN. I agree with that except—

Mr. KINCHELOE (interposing). Well, if that is true, why should this Congress be called upon to state a policy or to appropriate money for this purpose?

Mr. SHERMAN. I beg your pardon. He limited that simply to lands owned by States and the Government. No; I do not agree with that.

Mr. KINCHELOE. You do not agree with that?

Mr. SHERMAN. No, sir.

Mr. KINCHELOE. What percentage, in your judgment, would it supply if those lands were intensely reforested and protected from fire?

Mr. SHERMAN. Thirty per cent.

Mr. KINCHELOE. You and the gentleman from Wisconsin do not agree at all about that.

Mr. SHERMAN. No.

Mr. KINCHELOE. Individuals are not going to reforest their land except where they are able to do it and make a return on their investment. Business men are not going to reforest except where they can make a return on the investment. You can not blame them. That is natural.

Mr. SHERMAN. Certainly.

Mr. KINCHELOE. Now, when you have got millions of acres owned by the Government, 7,000,000, you say, owned by the States, that are not reforested, would it not be a pretty safe and a pretty good proposition for the Government first to go out and reforest lands owned by the States and owned by the Federal Government rather than to pay the owners to reforest their own lands? Do you not think that would be what should be done first?

Mr. SHERMAN. If there is some means by which, with the expenditure of a little money, it could be done the other way, I think it should be accomplished.

Mr. KINCHELOE. Here is the question: Of course, you would think that it was a great step in the right direction for the Government to go out and reforest its own lands and that of the State?

Mr. SHERMAN. That would be a step in the right direction; yes; but this bill does not contemplate that.

Mr. KINCHELOE. It absolutely contemplates taking on all of the phases of the question and the completion of this survey, even though it would cost \$100,000,000, which it might eventually cost.

Mr. SHERMAN. No; I think this survey is not going to cost more than \$3,000,000. That is why we ask for \$3,000,000.

Mr. KINCHELOE. Well, it would appear to be a practical business proposition to make the survey in such a way as a practical business man would make it if he proposed to take up this question and not make a survey as to what the land is suited for, and how much is growing. I do not think a practical business man would do that, and why should the Government do it?

Mr. SHERMAN. I think either a business man or the Government, before it went the limit, ought to determine what that limit should be.

Mr. KINCHELOE. Would do what?

Mr. SHERMAN. Would determine what that limit should be.

Mr. KINCHELOE. You mean that it would not be possible until the survey was made to act intelligently?

Mr. SHERMAN. A business man would want to know what the limit was to be, but until we make this survey we can not know that, and we do know that this start is necessary.

Mr. KINCHELOE. Yes; a start in the right direction for the Federal Government to simply get all of this money from the taxpayers of the country and make this appropriation for this purpose, for something that you do not know, your office does not know, your service does not know, your department does not know what it will cost. It may cost \$100,000,000. Why would it not be the practical thing and the business thing to do if Congress is going to do anything for us to go out and appropriate enough money, authorize an appropriation for this survey and then have the facts before us before we start to embark on something that we do not know where it will end?

Mr. SHERMAN. We do not know what it is going to cost, the exact amount that it is going to cost, or what the ultimate amount will be, but we do know that this is a thing that must be done in any event.

Mr. KINCHELOE. Why, certainly.

Mr. SHERMAN. So, if this money is available we can start on it and we can work on it until it is completed.

Mr. KINCHELOE. You certainly have not got sufficient information to go ahead and start this thing. You do not know whether you will need \$100,000,000 or not while you are starting this thing. If you have a survey made, we will be able to work in an intelligent manner, and we will know what it is going to cost and whether the Government will be able to carry it on or not if the survey is made.

Mr. SHERMAN. I think that it is absolutely necessary that we should do these things and that there should be a start. There is that much known.

(Whereupon, the committee adjourned to meet at 1.30 o'clock p. m. of the same day.)

AFTER RECESS.

The committee reassembled at 1.30 o'clock p. m., pursuant to recess.

The CHAIRMAN. The committee will come to order. Mr. Snell, whom will you present next?

Mr. SNELL. Mr. Chairman, we have asked the gentlemen from some distance away to make their statements as brief as possible, because we want to hear a short story from each one of them, and we will try to get most of them on this afternoon if possible, and any of the other witnesses that have been on the stand before and who live near the vicinity of Washington we can produce them at any time to answer any questions the committee would like to have answered, and I will say that at that time or later I want to make a statement myself relative to forest cruising, etc., because I have had 18 years' personal experience; but I will make that at another time.

We will present first Mr. Elbert H. Baker, who is president of the American Newspaper Publishers' Association, who will speak on this proposition from the standpoint of the publishers.

STATEMENT OF MR. ELBERT H. BAKER, REPRESENTING THE AMERICAN NEWSPAPER PUBLISHERS' ASSOCIATION, THE PLAIN DEALER, CLEVELAND, OHIO.

Mr. BAKER. The newspapers take a very direct interest in this bill because paper is their fundamental raw material, and we are faced with a constant widening of the gap between our offices and the source of supply, widening in distance and hence in cost, and we feel that it is extremely necessary, first, that abundant, efficient fire protection be found for the forests of the country, and that following this in our order of precedent would be the matter of ascertaining the physical value, the condition of the timber, and all that sort of thing, of the standing timber of the country.

The production of paper in its various forms, including print paper, is about 7,000,000 odd tons per year, of which the newspapers consume about 2,100,000 tons. I am speaking of that because so often newspapers are accused of denuding the forests and all that sort of thing, where we really are a part of the process only. It is not so many years that our source of supply was nearby. We were getting paper when I first began from our own town; then we were getting it from Niagara Falls; then we had to make a break that took us into Canada—or took us to Maine next and then into Canada. With every effort that has been made by the manufacturers to make the price a fair price to the newspapers the cost now is twice the prewar rate. Now that becomes a simple matter of price at which the publication is sold, to be sure, and yet, as I look back over what seems to me not so many years, we were making four-page papers at 5 cents. I remember very well in looking over files recently that the entire space that the newspapers of Cleveland could give to reports from the front during the Civil War was about half a column, and as we think of it now that seems almost incredible.

The condition in England, the shortage of paper during the war, meant the curtailing of a 32-page paper to about 6 pages; the cutting down of all news to a bare statement of fact, even in so exciting a time as that, and the making of an advertising rate to business that was seven or eight times the prewar rate. Of course it was an emergency matter; they were paying 26 cents a pound for paper; their prewar price had been 2 cents or thereabouts, and this condition has slowly come as the supply goes farther from the point of publication.

Now, it has seemed to us that with the fearful destruction of standing timber of all kinds, if the United States Government will cooperate with the different States, as proposed in this bill there will come a complete change in the trend of the long curve. It is now downward as far as we are concerned in supply and very rapidly upward in price. We feel that in the long period it will come back to more nearly a normal price, and the newspapers are therefore very strongly in favor, as I say, first of the matter of fire protection which they deem vitally necessary, and in the matter of cooperating with the States, that we may have the basis on which further work may proceed.

In the State of Ohio we have made, not large but sufficient appropriation for the work that has already been undertaken. Progress is being made there. With us it is more a question of restoring hardwood timber than it is the soft woods, because we are in better shape to do that. Our growth is very largely hardwood growth. In other States, as you have been so much better told than I can tell you, our pulpwood must be grown, but it need be no further from us than New York, and we feel that it means everything to us.

The 550 newspapers of our association are using 80 per cent of the print paper used in the United States and we have had this matter up in conventions and otherwise repeatedly. We express to you an intense interest in the whole thing, and urge strongly that these steps be taken.

I thank you very much.

Mr. SNELL. We will now present Mr. W. L. Hall, secretary of the Central States Forestry League, who will speak to you about the extension of the national forests by the purchase provision that is carried in this bill.

STATEMENT OF MR. W. L. HALL, SECRETARY OF THE CENTRAL STATES FORESTRY LEAGUE, REPRESENTING THE UNION LEAGUE CLUB OF CHICAGO, ILL.

Mr. HALL. Mr. Chairman, I will say that I appear before the committee not specially as the representative of the Central States Forestry League, but rather as a representative of the Union League Club of Chicago. I am secretary of the Central States Forestry League, it is true, an organization which is attempting to promote forestry in the central part of the West, but for certain reason that organization has not thought it best to express itself before this hearing; consequently my representation here is in behalf of the Union League Club of Chicago and I will hand you a letter which names its representatives.

The CHAIRMAN. Without objection the letter will be inserted in the record. (The letter referred to follows:)

UNION LEAGUE CLUB OF CHICAGO,
Chicago, January 7, 1922.

HON. GILBERT N. HAUGEN.

Chairman Committee on Agriculture.

House of Representatives, Washington, D. C.

DEAR MR. HAUGEN: The Union League Club of Chicago has steadfastly been interested in maintaining the forest resources of our country. During the past year the club has been active in studying the timber situation and in working out practical plans for forestry, especially for the States of the Central West. It has cooperated with other organizations in steps to secure an adequate forestry policy for the Nation. The club was represented at two hearings in Washington in the early part of 1921. In February it held an important meeting, attended by representatives of eight States, at which was organized the Central States Forestry League. In various ways the club has contributed to the starting of this organization.

In order that the position of the club may be clearly understood, its public affairs committee, through which the club functions on public matters, adopted on January 3 the inclosed statement of its position on the forestry question. This statement is called to your attention in view of the hearings which your committee is shortly to begin on forestry bills now pending in Congress.

The club has selected as its representatives at the coming hearings, Messrs. Elmer C. Hole and William L. Hall, both of whom are familiar with the timber conditions of the country and with plans which are proposed for meeting the forestry problem. It is respectfully requested that your committee, in the course of its hearings, give an opportunity to our representatives to be heard on the important question which will be before you.

Very truly, yours,

J. V. NORCROSS,
Chairman Public Affairs Committee.

Mr. HALL. May I say, in the beginning, that I support the principle of the various proposals in the Snell bill. I do not wish to say that I am wedded to the wording of any of those sections, and I would like to propose certain changes myself—or some of them—at the proper time. The committee in charge of this hearing, however, has asked me to express my views, especially in regard to sections 6 and 7 of the Snell bill, which sections deal particularly with the purchase of lands and with the purchase program of the Government.

Mr. McLAUGHLIN of Michigan. For a time you were connected with that commission whose duty it was to purchase lands, were you not?

Mr. HALL. Yes, sir.

Mr. McLAUGHLIN of Michigan. For how long?

Mr. HALL. I was a member of the Forest Service for 20 years. From the time of the passage of the Weeks law in 1911 up till 1918, during the war, I had charge, under the forester, of the work done in the Forest Service looking toward the purchase of those lands. We received the proposals; we examined and appraised the timber and lands; we worked out the negotiations and presented the cases to the National Forest Reservation Commission for its approval, as directed by law. In that time there was acquired about 1,700,000 acres of land.

Mr. JACOWAY. What was the average price you gave for it, Mr. Hall?

Mr. HALL. If you will permit me, I would like to come to that in the regular order, as I have a plan laid out for my talk.

Mr. JACOWAY. Very well.

The CHAIRMAN. Now, can you tell us something about the policy, what can be done with this matter here, about the purchase, and where, and when?

Mr. HALL. I will attempt to cover that as well as I can. I wish to say, in the beginning that the Snell bill makes extension of the national forests one of the very important proposals.

As members of the committee have noted, the largest single appropriation in the bill is mentioned in connection with the purchase of lands and the extension of the forests. There are three different plans proposed in the bill by which the extensions of the national forests will be brought about. I will discuss only one of those, but in order to get the plan before the committee I will mention what the other two are.

One proposes to add to the national forests certain forest lands which are now in the public domain, within the Indian reservations, or within revested lands, or perhaps in other status—add them to the national forests to become a part of the timber-producing lands of the Federal Government, to be permanently so held. That plan is covered in the last three sections of the bill, and I understand that a statement in explanation and support of that phase of the matter will be presented to the committee. I will therefore not cover it.

The second plan of extension is covered in section 8 of the bill and provides for the rounding out of the present national forests through a plan of exchanges under which the Government would give timber, or perhaps timbered lands, and would take in exchange privately owned lands that are desirable for the administration of the forests and for their extension out to their logical boundaries. That plan will also be presented by another speaker, so I will give no further attention to that.

The part that I want to direct special attention to, therefore, is sections 6 and 7.

I want to call attention to this fact: The national forests, as they have been set apart and developed in the United States, have been the big outstanding accomplishment in forestry. The law under which they were established was enacted in 1891. As members of the committee know, the project was not understood at first; there was less understanding; there was very bitter opposition to that policy, and for the first 20 years there were constant efforts made in Congress to do away in whole or in part with the national forests. That feeling and that situation has passed away. The national forests have now demonstrated themselves with their 30 years of experience and test. Instead of dealing with bills for the abolishment of the forests, or for the elimination of certain portions of them, Congress now has to deal with bills for the extension of forests, or for the consolidation of forests by providing for exchanges, for individual forests or groups of forests. Why this change? It is solely because the national forests as a system, as a plan, as a national undertaking, have proved and justified themselves. Wherein have they done that? They have done it in several ways.

With the lumberman—to mention that phase first, not because it is important but merely to bring it to mind—with the lumberman they have justified themselves, as is shown by the increasing number of timber operators in the West who are desirous of buying timber from the Government and who are operating on Government timber.

With the local communities they have justified themselves, as is shown by petition after petition coming to Congress for extensions of the forests, additions, and for exchanges by which the national forests will be consolidated and the plan more firmly founded even than it is now.

The national forests have further justified themselves to the whole public on the basis of regrowth. We have succeeded better as a Nation in protecting the lands from fire, in establishing a new forest where the old one was cut away or where it had been burnt away on the national forests than we have any place else.

Mr. KINCHELOE. The thought just came to me, does the Government have any restrictions on those to whom they sell this Government timber about whether it shall be exported out of this country or not?

Mr. HALL. There are those present who can answer that better than I, but I think not.

Mr. KINCHELOE. They are at liberty to export it if they want to?

Mr. HALL. Yes, sir; the national forests again have proved themselves as a business investment for the Nation. We have in them, according to the figure

which is used, some 580,000,000,000 feet of standing merchantable timber. That timber, in accordance with my own judgment, is worth in excess of \$1,000,000,000. The cost of the administration and protection and improvement of the national forests—that is, the total cost of the projects since they were passed to the Agricultural Department in 1905—I am informed by the Forest Service has been not in excess of \$80,000,000. That shows a splendid investment on the part of the Nation.

Mr. KINCHELOE. Now, that cost, \$80,000,000, does that include the amount of timber sold to private individuals, or do you mean that there has been \$80,000,000 appropriated out of the Treasury of the Government in addition to what has been received for the timber?

Mr. HALL. I have not counted in that the receipts from the resources of the forests.

Mr. KINCHELOE. Well, that \$80,000,000 represents appropriations out of the Federal Treasury?

Mr. HALL. Yes, sir; the total appropriations have been somewhere in the neighborhood of \$80,000,000. The value of the standing timber alone must be in excess of \$1,000,000,000. That does not take into account the value of the soil; it does not take into account the value of the grazing on forests, the value of the ranges; it does not take into account the value of the water powers; it does not take into account the value of these lands for recreational purposes or for any other purpose than for the standing timber that is now on them.

Mr. JACOWAY. Mr. Hall, just in a word, as a business man would want to know—the Government has spent \$80,000,000 by appropriation?

Mr. HALL. \$80,000,000; yes, sir.

Mr. JACOWAY. Now, that is what they have spent. What would you say that expenditure of \$80,000,000 would increase, say, in a period of a decade or 10 years? In other words, by the expenditure of \$80,000,000 what would the return be, in your judgment, if you can estimate the returns, taking into consideration all things—the land, the grazing privileges, the water power?

Mr. HALL. Are you thinking now of the 10 years that lie ahead of us?

Mr. JACOWAY. Just take any 10 years that you want to. Can you state it in dollars and cents?

Mr. HALL. I would use the figures that I just gave you.

The CHAIRMAN. What was the valuation when you started?

Mr. HALL. The valuation when we started—these lands were Government lands and had no appraised value at that time.

The CHAIRMAN. Well, some estimate was made of them?

Mr. HALL. They were on sale at the time.

The CHAIRMAN. We had more forests then than we have now?

Mr. HALL. Yes, sir.

The CHAIRMAN. We were being told all the time that the forests were being depleted; now, what were these lands worth at that time?

Mr. HALL. I think under the timber and stone act these lands could have been acquired at \$1.25 an acre. They had not been taken up under that arrangement.

Mr. KINCHELOE. What was this \$80,000,000 spent for—buying, acquiring additional forest reserves?

Mr. HALL. Oh, no; it has been spent in protection and administration and improvement of the national forests; and in that figure I am not including now the land that has been acquired under the Weeks law, but only those lands that were set aside from the public domain.

Mr. JACOWAY. Now, we have got a great estate there in which \$80,000,000 has been invested; what is it worth now?

Mr. HALL. Over a billion dollars. That is my answer to your question.

The CHAIRMAN. Should the Forest Service have credit for \$1,000,000,000?

Mr. HALL. No; I mean to say that because the Government undertook that policy and carried it out in that way, it has an estate in which the timber alone is worth a billion dollars.

The CHAIRMAN. What would it have been worth if we had not taken it over?

Mr. HALL. It would not have been worth anything to the Federal Government. It would have been lost. It would be in private hands, and, of course, that timber would be valuable to the private owners at this time.

Mr. KINCHELOE. What would that timber be worth at the time we took it over?

Mr. HALL. Well, if we should place a value of \$2 a thousand on it now, which may be a little high but perhaps not an excessive figure, I do not suppose we should consider it worth more than 15 cents a thousand feet at the time when the reserves were set apart as national forests.

Mr. KINCHELOE. How much would you estimate was the intrinsic value of it then?

Mr. HALL. I am not counting on any change in the amount of timber, I am assuming that we had the same amount of timber then that we have now. Of course there has been some growth, but I am disregarding that.

Mr. KINCHELOE. Then all that has inured to the benefit of the Government, if it is worth no more now than it was when it was taken over, is the amount derived from the timber sold in the meantime.

Mr. HALL. You have the estate.

Mr. KINCHELOE. I understand, but you say that the timber on it now, you think, is not worth any more than it was when it was taken over.

Mr. HALL. Oh, no, sir; I did not say that.

Mr. KINCHELOE. Well, that is what I want to know.

Mr. HALL. I failed to make myself clear.

Mr. KINCHELOE. Perhaps you did not understand my question. Did you say it is worth a billion dollars now?

Mr. HALL. Yes, sir.

Mr. KINCHELOE. What was it worth 30 years ago? What was that timber worth when the Government took it over?

Mr. HALL. Let us figure it on the basis of per thousand feet.

Mr. KINCHELOE. It was not worth as much a thousand then as it is now.

Mr. HALL. No; let us say it is worth \$2 a thousand now; at that time I would place a value on it, if you wish me to estimate it, of 15 cents per thousand feet. That means an accretion of from 15 cents to \$2 per thousand.

Mr. KINCHELOE. Well, that is governed a great deal by the increase in the market value of timber.

Mr. HALL. Yes, sir.

Mr. KINCHELOE. But supposing lumber was not worth any more today than it was the day it was taken over; how much more, if any, is the timber worth to-day than it was the day it was taken over?

Mr. HALL. It would not be worth any if it had not increased in value.

Mr. KINCHELOE. So that if it had not increased in value, all that has inured to the benefit of the Government would have been the amount of timber that you have sold to private individuals in the past 30 years?

Mr. HALL. Yes; if you assume that.

Mr. KINCHELOE. Now you have got an offset against that of \$80,000,000 that came out of the Treasury.

Mr. HALL. Yes; but that is an assumption against the facts.

Mr. KINCHELOE. I am simply speaking about it as a business proposition.

The CHAIRMAN. Is it your opinion, then, that the Forest Service should have been given credit for increasing the value of the timber?

Mr. HALL. No, sir.

The CHAIRMAN. Well, where do you get in, unless you take credit for the increase in price?

Mr. HALL. I get my argument in in this way—

The CHAIRMAN (interposing). What do you mean by "taking over"? It belonged to the Government before; it belongs to the Government now, does it not?

Mr. HALL. I meant the taking of those lands out of the public domain where they were available under the public-land laws.

The CHAIRMAN. That did not transfer title.

Mr. HALL. It did not transfer title; it merely set them apart for the purposes of forest production.

The CHAIRMAN. Well, the title remains exactly where it was. So far as the areas are concerned they have exactly the same number of acres that they started out with, except they have less timber by that which has been cut off, and then you have to add the growth. You, of course, understand that we turn over the forests to the Forest Service and they sell the timber, all they can sell, and the grazing fees and everything that goes with it has gone into the forests, and besides that we have put in several million dollars on top of that. Are you going to give us the results of this investment?

Mr. HALL. Yes, sir; I have attempted to do that and will repeat it.

The CHAIRMAN. But you started with 15 cents and shoved the price up to \$2. We have cleared that matter up; the Forest Service does not take credit for that. Supply and demand regulate the price.

Mr. HALL. All the credit that we need to give to the Forest Service is for the wise and efficient administration that the forests have had.

The CHAIRMAN. I agree with you on that.

Mr. KINCHELOE. Then the greatest asset in it has been conservation for 30 years?

Mr. HALL. Yes, sir.

The CHAIRMAN. Now, can you give us an estimate as to that, as to the result?

Mr. HALL. I think it is well expressed in the figure that I gave you, that this property which had a value of only a few cents per thousand feet 30 years ago is now worth \$2 or \$2.50 a thousand feet.

The CHAIRMAN. The Forest Service does not take any credit for that; supply and demand has regulated that.

Mr. HALL. Would you say that we need to work out just what credit the Forest Service should get out of it? Can we not leave out the Forest Service?

The CHAIRMAN. But I am just trying to get your point of view.

Mr. HALL. The credit, I think, should be to the policy of the Nation. The Government decided upon a certain policy; that it would withhold a portion of its remaining timberlands for timber production and for watershed protection. That policy has grown into greatly increased values, which are somewhat indicated by the figures that I have given you.

The CHAIRMAN. Now, I should think that that would be indicated by the number of feet increase in lumber. I do not see that the price of lumber enters into it at all.

Mr. KINCHELOE. He says there has been no increase.

Mr. HALL. I will go further into that statement. In presenting this matter to the committee I had not expected to refer to the matter of growth. A large portion of the national forests is covered with virgin timber in which there is a practical balance between growth on the one side and decay on the other. There is not much change there. A very considerable acreage had been previously burned over, or during the Government holding had been cut over—not a large acreage but some. Now, on that land—at least on a large portion of it—there has been taking place this regrowth that we have been discussing, and that amounts to a very considerable figure. I am not prepared to tell you how much it means. Probably as compared with the total timber stand it does not amount to a great deal, but it amounts to something and it is on the right side of the ledger.

Mr. KINCHELOE. What do you mean by decay there? I understood that all merchantable timber after it is grown and has begun to decay you sold it immediately. I did not think there was any loss there.

Mr. HALL. You must bear in mind, as you have mentioned yourself in the hearing, the national forests include about 156,000,000 acres. Timber is sold from the forests, but of course the sales reach only, as yet, the more accessible portions, a very small percentage, just a few hundred thousand acres compared with the total holding, so that the great body of timber has never been touched at all.

Mr. KINCHELOE. It is a fact, then, that there is quite a lot of timber that is really decaying in the national forests?

Mr. HALL. Yes; individual trees.

Mr. KINCHELOE. That is what I said.

Mr. HALL. The timber grows up, matures, stands for a while, and finally begins to decay and passes away.

Mr. KINCHELOE. And you admit that is because of its inaccessibility?

Mr. HALL. Yes, sir; that is something that we can not help.

Mr. JACOWAY. Mr. Hall, at the time the policy that you speak of was inaugurated by the Government to save the timber of the country, weren't these conditions manifest: The public land was being taken up under the stone and timber act; it was also being taken up under the homestead act; it was also being taken up by purchase. Now the statutes were passed preventing taking up land under the stone and timber act, and also withdrawing from sale the Government land at \$1.25 an acre, and then it put severe restrictions on homesteading, the provisions of the law being that you could homestead no land save and except that land that was adapted to agriculture. Now isn't the whole question answered by saying that you have conserved a great estate by providing ways to eliminate the waste and holding that estate until it has increased in value to a billion dollars?

Mr. HALL. Yes. And by one other step, if I may give it, and that is by a very careful classification of all those lands, by which it has been attempted to work out the agricultural lands where they lie in small bodies, and not to hold them within the forests, in other words, to separate out the lands that

are truly and permanently timber lands in character, and hold those and not hold the lands that are agricultural lands.

Mr. JACOWAY. As to the deterioration, a forest will deteriorate just about as much in virgin timber in a period of 20 years as that virgin timber will increase in growth?

Mr. HALL. Yes, sir; just about a balance.

Mr. JACOWAY. But the growth comes in the younger timber?

Mr. HALL. Yes, sir.

Mr. JACOWAY. And, as I understand it, a forest will reproduce itself in a period of about 30 years?

Mr. HALL. No, sir.

Mr. JACOWAY. Well, what is the length of time?

Mr. HALL. There have been references to the time which it takes to grow timber. I think perhaps the statement which I am going to make will vary from some of the statements that have been made, but I am glad to have this opportunity to bring out the point. I believe that it is a mistake for any of us to think of a timber crop being produced from a small-sized tree to a merchantable condition in any part of the country in less than 40 years, and I would give the range of time which is necessary as from 40 to 100 years, depending upon the kind of timber you want to grow.

Mr. JACOWAY. Well, that is not true of cut-over land, where you leave trees that are 4 inches and 6 inches in diameter?

Mr. HALL. No, sir; that is true where you go in and replant, and where you find upon it trees perhaps no higher than this table.

Mr. JACOWAY. Most of the land that has been denuded of its merchantable timber has this second growth on it, does it not?

Mr. HALL. A great deal of it does, but a great deal does not.

Mr. JACOWAY. Doesn't a greater per cent have it than does not have it?

Mr. HALL. I think so; yes, sir.

Mr. JACOWAY. Well, then, would not that land that has timber on it that is 4 to 6 inches in diameter—would that not reproduce itself in 30 years so that you can saw merchantable timber from it?

Mr. HALL. Yes; that is frequently the case; and that is just the reason why what we call "selective cutting" is used in many instances—to leave those trees that are already well started and have 30 or 40 years' growth.

Mr. JACOWAY. That is the primary thing in your thought?

Mr. HALL. Yes, sir; a very primary thing.

The CHAIRMAN. That is true in certain localities, but what about other localities? I have been told that it takes 130 years to grow merchantable timber, and I was told when I was out West that they were cutting trees that had grown there for 400 years.

Mr. HALL. Yes; that is actually true. Now, when you take the big timber that grows in the West—the yellow pine that grows out there, and the sugar pine and fir—that timber is three or four hundred years old in many instances.

The CHAIRMAN. How many years will it take to produce merchantable timber of that kind?

Mr. HALL. It is fair to presume that the Federal Government will never start young trees and hold them till they reach that size. They will be cut long before that.

The CHAIRMAN. But how long will it take to produce them?

Mr. HALL. The general belief is, Mr. Chairman, that where forests are grown on public lands, on the part of the Federal Government or the States, the trees will not be held to a greater age than about 100 years, and that in many cases the crop will be cut when it is from 75 to 80 years old.

The CHAIRMAN. It is age that makes the quality, is it not?

Mr. HALL. Yes, and this means that simply in the future we will not expect to get the quality that we now get from our virgin forests.

The CHAIRMAN. Why should we not have it?

Mr. HALL. Of course, if we desire the quality we must wait for time to perfect it. Nothing else will do it.

Mr. KINCHELOE. Timber grows faster in a warmer climate than it will in a cold climate, does it not?

Mr. HALL. Yes, that is true.

To pass on to the next point that I wish to make, the purchased forests of the Eastern States have likewise been a success. They have been a success for the same reasons as have the western national forests been a success. They

have served the same purposes. Some members of the committee will remember the very time when there was under discussion the plan of starting the policy of paying out Government money for national forest lands on the watersheds of navigable streams. Finally the committee was convinced and Congress was convinced, and in 1911 the Weeks law was enacted. There were considerable difficulties in working out that law. It was to apply especially in the mountain regions of the East. Titles were in a very serious condition and it took a long time to get a procedure worked out. Some difficulty was experienced in getting negotiations worked around so that land could be acquired on reasonable terms. Nevertheless there have been purchased to date under that law and under appropriations then and subsequently made, 2,017,718 acres.

Mr. KINCHELOE. In what part of the United States has that been purchased, all over?

Mr. HALL. No, sir; the purchases have been made in the White Mountains, including New Hampshire and Maine, in Virginia, in West Virginia, in North Carolina, in Tennessee, South Carolina, Georgia, Alabama, and Arkansas.

Mr. KINCHELOE. Let me ask you for my own information, is there any Government reserve in the eastern part of the country adjoining Tennessee?

Mr. HALL. Yes.

The CHAIRMAN. Now, what is going to be the policy? Where are you going to purchase land from now on? The people out in the Middle West are paying taxes for developing the forests of the East. Is that policy going to be continued; are purchases to be made in certain localities or scattered all over the country?

Mr. HALL. May I go a little further to develop this thought and then return later to your point? The total cost of these 2,000,000 acres, including the cost of the land, the cost of examinations, cruises, surveys, title work, etc., to date has been \$12,178,396, and there has been expended on them for protection, administration, and improvements as Government forests \$1,064,711.

Mr. KINCHELOE. How many acres did you say you purchased with that \$12,000,000?

Mr. HALL. Two million seventeen thousand seven hundred and eighteen acres.

Mr. KINCHELOE. Averaging about \$6 an acre?

Mr. HALL. Yes, very close to that. The total cost of that project then to date has been \$13,243,107.

Mr. KINCHELOE. Let me ask you further right there. In buying that land in Tennessee and the mountains of Virginia and West Virginia and along there, do you just buy the surface or do you buy the mining rights with it? Do you get a fee simple title to the whole thing?

Mr. HALL. In by far the larger part of the acreage there has been a fee simple unencumbered title secured to the Government.

Mr. KINCHELOE. Hasn't a great deal of that land got coal under it?

Mr. HALL. Subsequent to the original act Congress gave authority to acquire lands subject to reservations of minerals or timber, and since that time a considerable acreage—I can not give you the exact acreage, as I do not have it here—a considerable acreage has been acquired with mineral rights outstanding, or perhaps in some cases the timber rights outstanding. The timber, however, to be cut within a short time, which was specified of course, and the timber only of certain sizes was included.

Mr. McLAUGHLIN of Michigan. Is that an amendment to the Weeks Act?

Mr. HALL. Yes, sir.

Mr. McLAUGHLIN of Michigan. When was that passed?

Mr. HALL. It was passed in connection with one of the agricultural appropriation bills, probably about the year 1912 or 1913. It was found a necessary amendment in order to get a workable plan.

Mr. McLAUGHLIN of Michigan. Under the first law the fee must be purchased without any reservations?

Mr. HALL. Yes, sir.

Mr. McLAUGHLIN of Michigan. Later the Government was authorized to acquire the land and not take the mineral rights?

Mr. HALL. It did that for this reason: That in so many of the tracts there had been reservations in previous conveyances, the minerals had been left behind in previous conveyances, and were not in the hands of the owner of the surface, or the lands were bought subject to a pending timber contract, which lacked a few years to be worked out, and in order to prevent the holding up of important purchases, Congress was asked to give that authority and did so. The Forest Service has been good enough to make, in connection with this expendi-

ture, a statement of the present value of that property. The service now estimates that property to have a value of \$19,262,765.

Mr. KINCHELOE. Was that because in the handling of that land additional timber has been grown?

Mr. HALL. There are two main causes. One is the increase in the value of timber products. That shows in two or three ways in those lands. The lands were appraised along in the years, say, 1911, 1912, 1913, and 1914, at a time when timber was at a lower value than it is now. When they were appraised only the timber that was merchantable at that time was included as having any value in the cruise. There was a lot of chestnut wood lying dead on the ground. It had no value then and no value was given to it. There were certain kinds of trees standing that had no value then. They were like weeds in the forest.

Mr. JACOWAY. Red oak, for instance.

Mr. HALL. Yes; certain of the oaks. They were, therefore, not included in the cruise, but with the advancing timber prices there has come value into those products which were not at that time valuable.

Mr. KINCHELOE. Are all these conveyances voluntary conveyances, or does the Government exercise the right of eminent domain?

Mr. HALL. They are all voluntary conveyances. So there is one instance of increased valuation. The other is growth. There has been a magnificent response on the part of nature to the protection which has been given to those lands. Personally I am acquainted with a great part of it; I have been over a great deal of it, and lands which were examined in 1911 and 1912, which had been burned year after year, sometimes perhaps for 150 years, and showed no growth coming on—you could stand in the forest and look out over vast areas of it because you could see over it, except here and there were trees standing far apart—protection has brought on to that land a forest which to-day stands 12 to 15 feet in height, and so dense that you can not see any distance through it at all. It is marvelous.

Mr. THOMPSON. May I ask what sort of timber that is? Is it hardwood?

Mr. HALL. Yes; it is hardwood growth.

Mr. THOMPSON. It is not pine.

Mr. HALL. It is oak, chestnut, yellow poplar, and similar woods.

Mr. PURNELL. What percentage of the increase could be properly and reasonably attributed to growth?

Mr. HALL. My answer must only be a guess, if you will consider that.

Mr. PURNELL. I am just leading up to another question that I wanted to ask you.

Mr. HALL. I would say that growth will not account for more than 20 per cent of that increase. The rest is due to the value which has come into the products which were there all the time.

Mr. JACOWAY. But this second growth is also true of pine?

Mr. HALL. Yes; but principally this is hardwood that I am talking about.

Mr. KINCHELOE. You do not attribute any of that to the increase in market value of the lands by reason of the war, do you?

Mr. HALL. No, sir; none at all. There has been very little increase in the value of the soil, such as has been the case in other places.

Mr. KINCHELOE. That character of land has not increased in value?

Mr. HALL. No, sir.

The CHAIRMAN. That is not taken into consideration in these estimates; the increase in value has not been taken into account in these estimates?

Mr. HALL. The increase that I have given you is all in timber growth. We have not counted any increase in land at all in this estimate.

The CHAIRMAN. That would be about 50 cents an acre. How many years has that been?

Mr. HALL. This expenditure has been made over a period of several years.

The CHAIRMAN. The average?

Mr. HALL. On the average, I would say about five years. So that the increase has been about 46 per cent, based on that figure.

The CHAIRMAN. You attribute 20 per cent of it to growth—20 per cent of the \$2.50 an acre—which would be about 50 cents.

Mr. HALL. Probably so far as growth is concerned, that would be true. Taking in the other items that I mentioned, of course, the increase would be much greater.

There is in sections 6 and 7 of this act a sentence which if it were enacted into law would carry the operations of the Government beyond the water-

sheds of navigable streams. That extension rests upon a constitutional question which I shall not undertake to discuss. My understanding is that briefs will be presented to the committee for its consideration, and if the committee is convinced that it is wise and that there is authority and fundamental law to make such extensions, then it is the purpose of this bill to carry the extension of the national forests by purchase beyond the watersheds of navigable streams to the various forest regions of the country, where the forests might be established for the purpose of promoting regrowth and for providing timber supplies. That is a question, therefore, which I presume the committee will not wish to question me further on, because I am not qualified to answer anything connected with it.

The CHAIRMAN. I am interested in knowing why certain navigable streams are selected and not others. A good many of them have been overlooked. Now there is some reason for that. We have some navigable streams in the Middle West.

Mr. HALL. There are very definite reasons for that in connection with the carrying out of the Weeks act. The chairman will recall that when this matter was first brought before Congress it was proposed to acquire forest lands in the southern Appalachians. Later there was a proposal to acquire lands in the White Mountains, in New England. Then still later those projects were linked together and finally after more discussion it was decided not to refer to any special region in the act, and the act was made countrywide but was based on the watersheds of navigable streams; but back of all the discussion was the understanding that the regions principally aimed at at the start were the southern Appalachians and the White Mountains, and consequently the watersheds of those regions were selected for the beginning of that law.

Mr. KINCHELOE. Was there ever any money under the Weeks bill appropriated for the headwaters of the Cumberland and Tennessee Rivers in the mountains of eastern Tennessee?

Mr. HALL. Yes; a very large acreage of land has been bought on the headwaters of the Tennessee River, but no expenditures, I believe, have been made on the headwaters of the Cumberland River. That is one of the streams which has not been reached. There are many important watersheds of navigable streams on which no purchases have been made. The appropriations that have been available have not been sufficient to carry them to all the navigable streams. It was recognized that that was so at the start, and consequently a program was laid out which involved about 5,000,000 acres in the southern Appalachians and 1,000,000 acres in the White Mountains of New England, and up till a few years ago no purchases were made beyond that. Some two or three years ago purchases were extended to all acreages in the State of Arkansas, and the purchases made there have been limited wholly to the lands within the exterior boundaries of the two national forests of that State and have been solely for the purpose of increasing the Government's ownership of timberlands there for the better administration of the lands.

Mr. JACOWAY. For the purpose of consolidation?

Mr. HALL. Yes; for the purpose of consolidation.

The CHAIRMAN. Well, large amounts of money have been spent, for instance, on the Mississippi River in an effort to make it a navigable stream. It is certainly one of the most important navigable streams in the country and not one dollar has been expended on that river.

Mr. HALL. On what river?

The CHAIRMAN. The Mississippi River. Why is it that the most important streams have been overlooked and all the money has been expended on certain others?

Mr. HALL. The Ohio is an important tributary of the Mississippi and considerable expenditures have been made at the headwaters of the Ohio. No expenditures have been made on the western tributaries of the Mississippi, for the reason that the western headwaters of the Mississippi, as the headwaters of all the great rivers of the West, are already very largely within the national forests, and therefore it was thought wise and the best policy in all the expenditures that were made under this act to make them on the eastern rivers, no matter whether they went west into the Mississippi or eastward into the Atlantic. That was the reason.

The CHAIRMAN. There is no thought of making the Mississippi navigable above the Twin Cities? There is no forest below there.

Mr. HALL. No; the application of this act, of course, is always at the headwaters of streams, and if any land is acquired in any portion of the country under this act, it is acquired at the farthest head, the headwaters of the streams.

Mr. JACOWAY. That is not true all down the line, is it?

Mr. HALL. Well, it is hardly true in your State.

Mr. JACOWAY. You take the Executive order of President Roosevelt, that included hundreds of thousands of acres lying adjacent to the Arkansas River, on both sides, taking the counties of Johnston, Yell, Pope, Franklin, Perry, and Faulkner.

Mr. HALL. Yes.

Mr. JACOWAY. There were thousands of acres that were put into the forest reserve by the Executive order of President Roosevelt that would feed into that stream.

Mr. HALL. Yes; they fed into the various rivers which in turn are tributary to the Mississippi, and the remark I made just a moment ago would not be exactly in line with your situation.

Mr. KINCHELOE. That was not under the Weeks Act?

Mr. HALL. The expenditures I am speaking of were under the Weeks Act.

Mr. KINCHELOE. The Executive order of President Roosevelt was before the Weeks Act.

Mr. HALL. Yes; that came before and was the result of a different law.

The CHAIRMAN. With the present high transportation rate, I take it the Mississippi River is most important from the point of view of transportation.

Mr. HALL. I did not get that.

The CHAIRMAN. I say with the present high transportation rates, the Mississippi River is the most important from the point of view of transportation.

Mr. HALL. Yes, sir.

The CHAIRMAN. Now, then, if any appropriation were made, it would seem to me that would be the most important one to make.

Mr. HALL. I thoroughly agree with you.

The CHAIRMAN. I have often wondered why it should have been overlooked entirely.

Mr. HALL. I thoroughly agree with that point of view. The statements I have made up to now are to show you that these purchased forests have been worked out in a businesslike way. They have been a success.

The CHAIRMAN. I do not consider it businesslike to overlook the most important stream in the country.

Mr. HALL. They have demonstrated it themselves, and the time has now come when this plan of establishing forests ought to be extended, first of all to the remaining navigable streams that are not now protected.

The CHAIRMAN. Well, the business plan would be to take up the most important streams first. There is no question about that if business or economy is to be taken into consideration.

Mr. HALL. I would not like, unless the committee wishes me to do so, to take the time to go into that matter thoroughly; but it can be proven, I think to your satisfaction, Mr. Chairman, that in the selection of streams for the application of the first expenditures the very important watersheds were selected. The Appalachian and White Mountain watersheds were wholly in private hands; they were in a very serious condition, so far as the forests were concerned, due to unrestricted fires and due to unrestricted timber cutting. They were on very steep lands. They were on soil such as we do not have in many portions of the country—soil that was especially susceptible to disastrous erosion, so that those higher slopes were simply being torn to pieces in many instances; and considering the facts as they then existed in 1911, and considering the whole countrywide problem. It was believed that there was the place to make the test.

Mr. JACOWAY. Because it would grow the very lightest grade of hardwood especially?

Mr. HALL. Yes; that was another reason. The time has now clearly come to extend that policy beyond the project that was at first laid out, the project of acquiring 5,000,000 acres, say, in the southern Appalachian Mountains and 1,000,000 acres in the White Mountains. It ought to be extended to the Ozark region; it ought to be extended to the southern pine region; it ought to be extended to the Lake States region and other regions, so far as minute examinations show the necessity of such extension.

Mr. McLAUGHLIN of Michigan. I think the real purpose of those who advanced the Weeks bill 10 years ago was to acquire forest lands regardless of navigable streams, was it not?

Mr. HALL. That was the first purpose, but to buy them with a view to the protection of streams too.

Mr. McLAUGHLIN of Michigan. No; it was confined to navigable streams, because of the opinion of the Committee on the Judiciary that Congress had authority to buy only such lands.

Mr. HALL. I am fully aware that that was the decision of the committee.

Mr. McLAUGHLIN of Michigan. And the bill was framed finally and passed in that way, over the protest of those who originally advanced the bill, and they accepted it very unwillingly.

Mr. HALL. Yes; I am fully aware that that was the case; but the working out of that plan has been in exactly the regions where it was expected to be worked out, in the eastern mountains.

Mr. McLAUGHLIN of Michigan. Now you think the policy of the Government ought to be to buy forest lands and forests, regardless of navigable streams, and you would do that in the face of the fact that the Government of the United States has now hundreds and millions of acres with which it is doing absolutely nothing, and there is no evidence of any policy, nothing in view of the way in which those lands are to be used?

Mr. HALL. What lands do you refer to?

Mr. McLAUGHLIN of Michigan. Lands owned by the United States that could be reforested.

Mr. HALL. I still do not understand what lands you refer to, Mr. Laughlin. Do you mean lands within national forests?

Mr. McLAUGHLIN of Michigan. There are millions of acres in the public domain that are suitable for forestry; there are sections aggregating great quantities of land within the boundaries of the national forests that should be reforested.

Mr. HALL. I think that figure is available. Mr. Sherman, do you bear in mind the amount of lands within the national forests that should be reforested by planting?

Mr. SHERMAN. No; I do not bear that in mind.

Mr. McLAUGHLIN of Michigan. And there are millions of acres of lands in the States that the States are doing nothing to reforest. They are letting them go on tax title and inviting their destruction to absolute worthlessness.

Mr. HALL. I present this whole matter, this important part of this bill, as based entirely upon the necessity of regrowing the forests.

Mr. JACOWAY. Back of all that, isn't this true, in response to Mr. McLaughlin's suggestion, that most of the lands in the States that are now being sold under tax titles, are lands that were taken up under the stone and timber act and abandoned after the timber was taken off of it?

Mr. HALL. Yes, sir.

Mr. JACOWAY. And land that was taken up by homesteading and the timber was taken off and the land abandoned.

Mr. HALL. Yes, sir.

Mr. JACOWAY. And that taken up by sale at \$1.25 an acre and abandoned because they would not pay taxes on it and it reverted to the State?

Mr. HALL. Yes, sir.

Mr. JACOWAY. Under your policy that could not happen again?

Mr. HALL. No, sir. I do not believe, Mr. McLaughlin, that the acreage of land that is now reverting to the States, if it was all brought together for all the States, is very large or that it would have a very vital influence in solving this problem. That period has passed. There have been great acreages of it in your State of Michigan, in all of the Lake States and in other places, and there is still some land passing to the States in that way, but no great amount.

The acreage within the national forests, if the committee will secure the figures—and I think they are available—will not be found to be very many million acres. I doubt if they are in excess of five or six million acres. So that is not going to solve the problem.

In urging the extension of our plan of national forests I do it solely on this basis: As Prof. Toumey remarked here yesterday, we have got to have re-growth of forests in the United States on a tremendous scale. If possible we want to secure that growth under a plan of cooperation that will not cost us heavily, but the one way in which we have found that we can make sure of

growth has been to acquire the cut-over lands, protect them from fire so that nature will bring up just as many young trees on them as she can, and then go in and plant up the spots where nature does not bring up the trees. And that is why it is necessary to go ahead with this plan of extending the forests by purchase.

I should like to get reforestation and to get the forestry policy for the country without paying much for it. I do not believe we are going to do it. I believe that when we actually get down to working out this thing we will have to pay for it. I feel sure, on the basis of the experience we have had on the national forests during the last 30 years, and the basis of the experience we have had during the last 11 years, that that plan will succeed, and our situation is so serious that we can not afford to let go of a plan that we know is working out successfully.

Mr. KINCHELOE. What do you think of the practicability of reforestation of private lands?

Mr. HALL. I think there is much to be hoped for from it, but I would not risk our future timber supply on that alone.

Mr. KINCHELOE. Well, it is not going to be done without investment on the part of the individual, and the individual will not do it unless he can be shown that he will derive an income from it.

Mr. HALL. No, sir; he will not go into the project unless he sees some income from it.

Mr. KINCHELOE. Certainly not. And if he does do it, of course the Government has got to do the reforestation protection, practically, has it not?

Mr. HALL. It has got to work with him for protection.

Mr. KINCHELOE. It will be a pretty proposition, wouldn't you think; more expensive than to reforest the public domain and the public land as it is?

Mr. HALL. No, sir; I am in favor of the other plan. I am in favor of going ahead with both of these proposals. I believe there is the possibility of accomplishing much on the plan of cooperation that has been discussed here in the past few days.

Mr. JONES. If the Government should come to the conclusion that it could not do both, which do you think it preferable, to go ahead and reforest Government lands exclusively until they are reforested, or to mix the two?

Mr. HALL. If I had to decide between the two proposals and definitely lay down one policy, I would hold to the plan of extending the national forests until we get more forests, but I do not believe in the necessity of doing that. I firmly believe in the plan of going ahead with both proposals.

Mr. KINCHELOE. I am just anxious to know how that proposition is going to work with private owners. Now, for instance, supposing I as a citizen of the United States have cut-over lands, 10,000 acres, that would look to your department as though it was a very attractive proposition for reforestation; you come to me as a representative of the Government, and I am about to sell this land because it isn't any account to me; I have got the timber off of it, and it is no account for agricultural purposes, and I am paying taxes on it. You come to me with the question of reforestation of that land. I say, "There isn't anything in it for me to do that; it will cost me something to go in there and put new trees out and protect them from fires in the fall of the year, when fires are raging everywhere." Now the point I make is: How are you going to make that attractive to me, except you come as a representative of the Government and agree to reforest that land and protect it from fire?

Mr. HALL. There are going to be thousands and thousands of owners who will look at it in that way.

Mr. KINCHELOE. Well, I am talking about a business proposition.

Mr. HALL. And they will look at it from the business point of view and see it as you see it now.

Mr. KINCHELOE. Now, what can you do as a representative of the Government under this bill to induce me to consent to reforest that land, except that the Government goes in and does it and protects it from fire?

Mr. HALL. I will begin in this way: Already we have some notable examples in this country of men who without much aid from the States and without any aid from the Federal Government have gone ahead and planned out a scheme of reforesting themselves.

Mr. KINCHELOE. Oh, I grant you that some people might do that, but I am talking about the business proposition. Of course, if you put it on the broad plane of patriotism, conservation of our national resources, if I have got plenty of money I might be induced to, for patriotic reasons, to go in and

cooperate with you; but I am talking about the cold-blooded business proposition. When you come to me, what inducements can you make to me for me to consent to reforest that land, except the Government goes and replants the trees and protects them from fire?

Mr. HALL. I can give under that plan—I could offer no inducements other than the inducements which have been mentioned and discussed here, the inducement of fire protection and possible relief from taxation, if it can be secured.

Mr. KINCHELOE. Now, wouldn't that cost the Government a whole lot of money?

Mr. HALL. Yes, sir; it is going to cost money, a great deal of it.

Mr. KINCHELOE. It would be a pretty expensive proposition, and do you not think the other is more feasible, where the State owns it and the Government owns the land? Of course, where the Nation is looking after the conservation of its national resources I can see where we could go in there and make some headway on it.

Mr. HALL. I thoroughly believe in reforestation as fast as we can get it accomplished, of all the public lands, national, State, and every other kind of public forest land, but with that done we will not have made a very long step in solving the timber problem.

Mr. KINCHELOE. The practicability of it was what I had reference to.

Mr. HALL. But this plan of national forests, whether set aside by proclamation or whether purchased with appropriated funds, is a demonstrated thing. We are right in the midst of it now, and we can see that it has been a good thing, and I venture to say that we are all glad that it has been done.

Mr. KINCHELOE. Now, you say it is going on all the time. It seems that the State of New York, the State of Connecticut, the State of Louisiana, and the State of New Hampshire have taken a great deal of initiative in reforestation in the way that I am talking about, but where is there a State on the Pacific coast that has reforested any? I am talking now about replanting.

Mr. HALL. You have had witnesses from the Pacific coast, and I myself am not from that region, so I will not undertake to answer that question.

Mr. KINCHELOE. I have asked all of them, and one gentleman testifying here yesterday told us that in New Hampshire, southern New Hampshire, where they are conducting reforestation, the State and county government was taxing them out of existence.

Mr. HALL. That is a difficulty we have got to face.

The CHAIRMAN. Now, how about the national forests? Let us see if we can get that cleared up. I understand we have millions of acres—nobody seems to know just how many—that are neglected, that are not protected against fire, and now it is proposed to buy much more.

Mr. HALL. I do not think that condition exists now.

The CHAIRMAN. If we have more than we can take care of now, what is the object of buying more?

Mr. HALL. I do not think the conditions you state prevail.

The CHAIRMAN. We have in the national forests 156,000,000 acres of land. How much of that is properly protected and cared for?

Mr. HALL. All of it.

The CHAIRMAN. I understood you a few minutes ago to say that much of it was being neglected.

Mr. HALL. Much of it is not being protected.

The CHAIRMAN. Yes.

Mr. HALL. I do not venture to say that the protection system is entirely complete, but it is all in the way of receiving protection, as good protection as can be given with the force at hand, the force available, with the improvement of the property to its present status, and with the funds available.

Now, of the national forests there are several million acres that have been burnt over in the past, seriously burned, and they are not covered with a stand of young timber. Those have got to be reforested.

The CHAIRMAN. That is not the fault of the Government or of the Forest Service; that simply could not be prevented.

Mr. HALL. No; we have not gotten to it yet.

The CHAIRMAN. Well, it is not possible. I think anybody that has traveled through the forests will admit that. You can not have a man following every wagon and every camp—

Mr. HALL. No, sir.

The CHAIRMAN. To see that they put out the fires. That can not be done.

Mr. HALL. No, sir.

The CHAIRMAN. So you can just figure that for all time to come you are going to have forest fires. You might plant a man on every quarter section of land and still you would have fires.

Mr. HALL. Now, in addition to the national forests, there are, I think, about 7,000,000 acres of land in State forests.

The CHAIRMAN. Well, let us deal with the national forests and find out how much of that is being neglected. We have been appropriating money here for a number of years, and putting a lot of money into this fund; what is the result of it?

Mr. HALL. My understanding of it is that not any is being neglected; that so far as men and resources are available all of it is under protection.

The CHAIRMAN. Mr. Sherman's statement was that they had only cruised a part of it; that they had only knowledge of a small portion of it.

Mr. HALL. I am not speaking of the cruising and determining what amount of timber there is.

The CHAIRMAN. That takes in the question of protection. I have been through some of those forests, and I know some of them are 20 to 30 miles apart—maybe a hundred miles, for all I know—and it would be a big job to get over them.

Mr. HALL. This is entirely apart from the matter of determining just how much timber we have got on the forests by cruises or in any other way.

The CHAIRMAN. Well, about the fire protection; we are dealing with protection just now. To what extent is it being neglected and to what extent is it being protected against forest fires?

Mr. HALL. It is being protected—all parts of the national forests are being protected from fire.

The CHAIRMAN. Adequately protected?

Mr. HALL. I would not say that. I do not think they are.

The CHAIRMAN. About what percentage?

Mr. HALL. My estimate on that would be that they are about 75 to 80 per cent efficiently protected from fire. Now, that may be wrong. I am not in a position to give you as accurate information, perhaps, as others in the Forest Service. That would be my estimate.

Mr. JACOWAY. Mr. Graves's testimony along that line was that they had protection for a vast area of it and, everything considered, they saved many hundreds of millions of feet each year by the protection they did have.

Mr. HALL. Yes; there is no doubt about that. And this lack of 100 per cent protection is no reflection on the Forest Service.

The CHAIRMAN. No; nobody is reflecting on the Forest Service. Nobody could have more respect for the Forest Service than I have, but that is not the question; we are trying to get at the facts of what is necessary to do, and I take it that before we purchase more land we ought to protect what we have. What further protection now is required?

Mr. HALL. I do not believe that the wise point of view, Mr. Chairman, for this reason: These national forest lands include very wild country. You know that appropriations are being made for roads and for trails and for telephone lines through them. Now, until those developments are carried pretty far along through a number of years yet and are largely worked out, we can not have very highly efficient protection in those forests, because we can not get into them to put the fires out.

The CHAIRMAN. The roads and trails are where the fires start, are they not? There is where the campers and tourists build and start forest fires.

Mr. HALL. Oh, they perhaps increase somewhat the danger, but they greatly increase the protection possibilities of the forests, too. That is what they are for, in a very large way. So it would not be good policy to hold up other expenditures until we have gotten a very high degree of protection on all the forest lands that the Government now owns. Time enters into it as a very important element. There have been cases in recent years where fires burned for two or three days before they could be reached by the fire-fighting crews. Inaccessibility accounts for that. As we build roads and trails and telephone lines and get at those fires quickly the problem can be handled better, but by no means would it be wise for us to hold up our purchase program for the complete solution of that. We have got to solve along as we go.

Mr. McLAUGHLIN of Michigan. Would it not be wise to refuse to purchase other lands until what we have are adequately protected?

Mr. HALL. Of course, they ought to be protected.

Mr. McLAUGHLIN of Michigan. The trouble is Congress has not shown a disposition to protect the lands it now has.

Mr. HALL. Well, I think I can testify in behalf of the Forest Service that it has done its utmost.

Mr. McLAUGHLIN of Michigan. The Forest Service hasn't anything to do with the money that Congress is willing to give. Congress has never been willing to go far enough; it has not appropriated the money necessary to properly protect the forests. Now, that is the disposition of Congress, and in the face of that you would advocate the purchase of more land. Why do you think that land would be protected? And without protection the purchase would not be advisable, would it?

Mr. HALL. Because, Mr. McLaughlin, we are dealing here with a tremendous problem that begins right now, this moment, and extends many years into the future. We can not be putting off one phase of the problem until the conditions affecting another phase are properly worked out. We have got to get about this and do everything we can as soon as we reasonably can. That is the reason why we should go ahead with the purchase program.

Let me cite you an instance. I was in the State of Louisiana a few weeks ago and passed through a very large tract of yellow pine land. It was one of the last large tracts to be made available to the saw mills. That tract of land was acquired, according to the information which was given to me, in 1918, at a price of \$93 an acre. I presume it is not over 30 years—or was not over 30 years prior to that—that this land was taken up from the Government at \$1.25 an acre. We know now that a vital mistake was made in the handling of that kind of land. That particular land is not, for the most part, agricultural land. The character of soil is such as to render it unavailable for agriculture. Under the present methods of logging it will be devastated of merchantable timber except so far as the State law would require the leaving of seed trees. So that that was a mistake. What ought to have been done in that region, and in all regions, was that a classification should have been worked out, and that the lands which were non-agricultural should have been held and the timber sold, as it is sold on the national forests. There would not then be the necessity either of completely destroying the timber stand in lumbering, or the necessity of the Government, the State, or some other public agency, perhaps, buying it back. Now, that was a mistake, and we are facing just the possibility of just as serious a mistake right now in the matter of this purchase program. We have been spending money for the purpose of acquiring lands at the rate of about \$1,000,000 a year in the last 11 or 12 years. If we should drop that off and leave a gap of several years, it would be just as serious a mistake in policy as it was to let that land go at that time. I think it would be more serious, because we know this present situation and we have some realization of its importance. The committees of Congress and our country at that time did not have such an understanding of the vital importance of that problem as they have now.

Mr. McLAUGHLIN of Michigan. If this land is bought as you suggest, something should be done with it. It will have to be developed and such timber as is on it will have to be protected at least from fire. That will take a good deal of money.

Mr. HALL. Yes, sir.

Mr. McLAUGHLIN of Michigan. Now, I venture to say that if you go before the committee having to do with appropriations for the national forests this year and ask for money sufficient to protect the national forests from fire, sufficient to do reseeding, reforestation, which you think is necessary, the money you ask for will be refused, and if the committee were to report in its bill a large amount of money, very much larger than has been carried in recent bills, the committee would have hard work in getting it through the House.

Mr. HALL. Yes, sir; we are going to have hard work with this program.

Mr. McLAUGHLIN of Michigan. That is the present condition, and until Congress changes its attitude toward the property it now has, so long as it persists in refusing money to properly protect what it has, would it be wise to go out and buy a lot more land? And what would be the fate of a bill presented by this committee authorizing the purchase of additional land when Congress is so disposed that it will not appropriate money enough to protect the land it now has?

Mr. HALL. The appropriations of this present year are reasonable for the protection of the forests. They are not all that we should like; not all that you

entlemen probably would like to see used in that way, or any of us, but they are reasonable in view of all the conditions that confront the country. The protection of the 2,000,000 acres that has been bought is reasonably efficient, and I have all confidence that if Congress appropriates money for further purchases it will follow that up with reasonable appropriations for administration and protection. I think it will. It has done so up to now. We have to fight for it sometimes. Our ideas do not agree with yours even, but the final results are pretty satisfactory and we are getting ahead. We have got to keep on going ahead and taking every step as we can.

Mr. KINCHELOE. Well, I thought the tenor of the whole hearings here had been that your appropriations were inadequate for fire purposes and that that was 75 per cent of the solution of the whole problem.

Mr. HALL. I question the statement that has been made in regard to the 75 per cent.

Mr. KINCHELOE. Well, I understand that it has been made time and time again, that 75 per cent of the solution of the problem was fire protection.

Mr. HALL. I myself do not understand what fire protection is 75 per cent of. Perhaps that is clear to the committee.

Mr. KINCHELOE. Protection of the national forests—75 per cent of the problem of protection of the national forests.

Mr. JONES. The point was made that if you had adequate fire protection the remaining problem would solve itself by interest of the States and individuals who hold lands.

Mr. KINCHELOE. And the domains would be reforested by reason of having fire protection; and if you get fire protection, 75 per cent of the rehabilitation problem is solved.

Mr. HALL. I think the statement in regard to 75 per cent needs further thought and needs to be cleared up. In my judgment, forest-fire protection is not 75 per cent of our whole problem, our whole forestry problem, especially if you measure it in terms of expense and cost. I know it is not. If it is 75 per cent, it is 75 per cent of something else. I myself have not used that expression, and I do not undertake to define it before the committee, but to my mind it is very vague as to what the meaning of that assertion is; and I think Col. Greeley was the first man who led us into the use of that expression, and he might be asked some time to make it clear.

Mr. JONES. And this gentleman from New Jersey also advanced the same idea. He represents about 19 different States—that is, forestry divisions.

Mr. HALL. I have myself listened to the expression several times before the committee. I think it needs to be further discussed.

The CHAIRMAN. Well, your 75 per cent had reference to the national forests, did it not?

Mr. HALL. I am not using the statement at all, except as I have attempted to repeat it. I do not know what it means.

Mr. JONES. Before you leave the question that Mr. Kincheloe had up a little while ago, just a little further development of that, with reference to reforesting private lands. Those private lands that have been cut over are worth only a very small amount—some two or three or four dollars an acre, I understand—in their cut-over condition—that is, nonagricultural lands?

Mr. HALL. Yes, sir.

Mr. JONES. Now, if they are reforested, in the course of 75 years, depending on the character of the trees, they would be made far more valuable, say, anywhere from \$30 to \$100 an acre, or even more?

Mr. HALL. Yes, sir.

Mr. JONES. Do you think it is wise for the Government to go to the expense of all that reforestation and then let private individuals have the benefit of it?

Mr. HALL. No, sir; I would think it very unwise for the Government to go to the expense of all that reforestation on private lands. I would not be in favor of that at all.

Mr. JONES. The Government would have created that value, and yet certain specific individuals would get the full benefit of the actual value at that time.

Mr. HALL. Not entirely. I am in favor of the Federal Government entering into a plan of cooperation to induce regrowth of timber on those lands. I believe that there is a possibility of much being accomplished in that way, but I am not willing to stake our whole forest policy on it.

Now, as to why it is that the Federal Government should go into that, which means, of course, that many of the States contribute to it, and, as you say, would

build up values which would belong only to the individual, let me give you the way I look at it. I should like to take the chairman's State, Iowa, as an illustration. It is not a forested State; it is a State of very high agricultural value; its land value ranges higher on an average than the land value of most of the other States. Nature has put the fertility there that makes it valuable. Iowa would be asked to contribute under this plan to the growing of trees in Minnesota and Wisconsin. Wherein would Iowa share the benefits? In this way: The State of Iowa would not be asked to give up any of its valuable agricultural land to a use which justifies an acreage value of only three or four dollars. Instead of having timberland that is worth only three or four dollars an acre, the land of Iowa perhaps is worth from \$150 an acre up. I don't know how high up—a good ways. Iowa is not penalized by putting any of her land to this low-class economic use—if I may use that expression. She uses all of her acres for a very high class of production, and from that point of view alone Iowa may be asked to contribute her part to the growing of trees on the cheap lands of Wisconsin and Minnesota, which are useful only for forest growth.

Mr. JACOWAY. But she would get reflex benefit if it made wood cheaper?

Mr. HALL. Yes, sir.

Mr. JONES. You would get reflex benefit from it, of course, but I am speaking of the value of the individual property as such at the time. Just for what purpose would you spend the money in the development of these private lands? Of course, I suppose we would all agree, practically, that the Government should cooperate in the matter of fire protection and in the stamping out of any diseases or epidemics that come on trees, if such come, but what additional cooperative expenditure do you think the National Government could afford to go to on these private lands, just for the benefit that might come to the general people in having a supply of timber?

Mr. HALL. I am very glad to give you my ideas as far as I can see in that direction. I would agree with you in going along on the part of the Federal Government—the Federal Government going along in cooperating in fire protection, in the protection from insects, or anything that might come along to destroy the forest. I would agree in the Federal Government going in with the States in requiring the leaving of any trees that are necessary to bear seed when the forest is cut off. As a part of the fire-protection problem I would believe in the Federal Government going in with the State to require the operators to clear up the slash as far as is necessary and paying part of the costs—paying their due part of the costs. I believe it will be right for the Federal Government to go in with the States and establish forest nurseries in a good many States in order that the trees may be sent out at cost or may be free, in order that planting may be encouraged on private lands. In those things I would go beyond the steps which you mentioned as being necessary. Now, as we get into it, it might be necessary to go further than that, but it seems to me I can see those steps now.

Mr. JONES. Well, I do not know just the extent that the Government can afford to go and I was asking you in order that you might develop it.

Mr. McLaughlin suggests that there are a great many millions of acres that are owned by the Government that are subject or, at least, capable of reforestation, and that up to the present time have been neglected because of lack of sufficient funds to do the work adequately and properly. Now, do you not think the first attention of the Government, outside of the fire protection and the matter that I mentioned awhile ago, should be devoted to taking care of the lands that are owned by the Government and developing them? Then if you have adequate appropriations to take care of the matter you mentioned, take that up as a later matter.

Mr. HALL. If we accept your assumption that there are areas of land owned by the Government not now protected, that would be the first step—one of the first steps to be taken. I do not think that assumption is correct.

Mr. JONES. You think that we have in the running appropriations—in the current appropriations—that have been made sufficient funds to properly care for and have properly cared for the reforestation of Government lands where they have needed reforestation?

Mr. HALL. Reasonably well. I want to see the protection plan for the national forests constantly improved. That is going to call for additional appropriations, but no vast amount. Reasonable increases will do it. I want to see something further done; I want to see the lands outside of the national forests, the timberlands outside the national forests that are owned by the

Government, brought into the forests, as is proposed in the later sections of this bill and as will be discussed later before the committee. I think it would be very wise to do that.

Mr. McLAUGHLIN of Michigan. Right there, Mr. Hall—in the early part of your remarks you spoke of the general sentiment of the country that approves the forest policy; that men from sections of the country that formerly opposed the policy now favor it. That change of sentiment has not been very much in evidence in the House. There has been a fight against the forestry provisions of the agricultural bill every time a bill was brought in, and a lot of opposition and ill feeling is shown by almost every Member from those Western States in which there are large forest reserves; and my impression is that those gentlemen from the States representing the opinions of the States believe that those forest lands ought not to be maintained as reserves; that they ought to be opened up as other lands were opened up in other States for settlement or turned over to the States entirely to be used just as they please. Now, that is my impression of the sentiment of the Members of Congress from the States in which the forest lands are located, and I have not seen any material change in sentiment during my service of 15 years.

Mr. HALL. Of course, I can not speak for that.

Mr. McLAUGHLIN of Michigan. A forestry proposition rarely, if ever, comes before the House but that men from the Western States attack it and insist that the lands shall be opened up for settlement, sold to private settlers, and the timber cut off, just as was done in other States where the Federal Government owned land; and that the control over that land and the timber ought to be absolutely in the State in which it is located. I think the other gentlemen of the committee who have heard the debates on the floor will bear me out in that statement.

Now, in regard to the amount of money necessary and the amount of money appropriated for reforestation and for fire protection, rarely if ever has the Committee on Agriculture, which up to a year ago had authority to report and recommend appropriations, recommended the full amount that the forester asked, and it was gathered from his remarks that he did not ask all he thought he needed, because he was asking only what he thought he might possibly get through the committee, and the committee recommended only such amounts as it thought the Congress would approve.

From those facts—and I believe I am stating facts—I gather that the Congress has not shown a disposition to appropriate money enough to properly take care of its forests. That is why I said I doubted the wisdom of this committee trying to get through a measure that would provide for the purchase of additional land—that is, in view of the fact that the Congress had not yet shown a disposition to properly take care of the land it already has.

Mr. HALL. This is all, as has been stated here many times, a matter of education. That the problem is important I think none of us now doubt. The question of how it shall be solved is one upon which there is difference of opinion. I believe that the thinking sentiment of the country, all parts of it, including the West, is that there must be maintained a strong system of public forests, national forests and State forests, and I think the worst blow that could come now or at any time would be any kind of a stroke that would do away with the accomplishments of the last 30 years in the national forests. I think a large part of the sentiment of the country supports that, as has been reflected by the witnesses before this committee at this time.

Mr. KINCHELOE. Let me ask you, before you leave that, to get your idea about the to me crude position in which we are placed if we enact this bill, so far as State cooperation is concerned.

Mr. Greeley testified in answer to a question that I asked him at the beginning of this hearing as to how many States there were in the Union that had a right under their constitutions to appropriate money for this purpose that there were only two. Those were Louisiana and either Vermont or New Hampshire; I have forgotten which. If that is true, here are 46 States in the Union that have no power under the constitution to meet this Federal appropriation in the way of cooperation, and therefore they have got to get an amendment to the constitution to give them power to appropriate this money, and do you not think it will be two or three generations before all of those constitutions are amended?

Mr. HALL. I may say in answer to your question that I did not so understand Col. Greeley's statement. I understood his statement—I suppose he is here

and can correct me—I understood his statement to be that two States had given expression of that authority in one particular way; that was as to the leaving of seed trees on pine lands that had been cut over. Other States that have that authority have given that expression in another way.

Mr. KINCHELOE. That was his answer to the question I put to him. He may have misunderstood my question.

Mr. HALL. I think he did.

Mr. JONES. I beg your pardon. He said he knew two States had that authority, and he thought some others had it.

Mr. HALL. There are 29 States that are now cooperating with the Government in fire protection. If that is an index of the number that have now the constitutional right to act in cooperation in this broad way, that is the number. There is the answer.

Mr. KINCHELOE. I would like to know if you can make the facts available for use in connection with this bill.

Mr. HALL. I understand, of course, that the inherent authority rests in all of the States. I think there is no question about that.

Mr. KINCHELOE. You mean, every State has the right under its constitution?

Mr. HALL. No; but every State has inherently the authority.

Mr. KINCHELOE. Yes; but perhaps you have had some experience in getting amendments to the State constitutions.

Mr. HALL. It is my understanding that a considerable number of the States have the constitutional authority now to enter into an agreement with the Federal Government on a question of this kind. But whether it is as many as half of the States, I do not know, but I am sure quite a considerable number have.

Mr. KINCHELOE. Could you ascertain that fact?

Mr. HALL. Yes, sir; I would be glad to ascertain that fact.

Mr. KINCHELOE. I wish you would, and put it in the record.

Mr. HALL. Yes, sir.

The CHAIRMAN. You spoke of the growing of trees in Minnesota and not in Iowa. The growing of trees in Minnesota, of course, brings it closer to our doors, and would be a great saving to us in freight.

Mr. HALL. Yes.

The CHAIRMAN. Now, why not get closer to the consumer and encourage the planting of trees in their midst?

Mr. HALL. I think it should be done.

The CHAIRMAN. When you appropriate money and make it available for this purpose, the people in the State of Iowa should get some benefit of it. But here in the East we do not get a cent out of it.

Mr. HALL. No.

The CHAIRMAN. We can buy at a lower price from Canada.

Mr. HALL. Yes.

The CHAIRMAN. I think this is a national movement, or should be a national movement, and a patriotic movement, and that you should get it closer to the people.

Mr. HALL. I think that the proposition should be worked out so that the lands that are not adapted to agriculture and are adapted to forest culture should be utilized, whether in Iowa or the Lake States, or anywhere else.

The CHAIRMAN. It ought to be done. Now, what is being done?

Mr. HALL. Pass this bill.

The CHAIRMAN. That will not help it.

Mr. HALL. This law will go further than anything else to establish a policy.

The CHAIRMAN. It seems unwise to plunge headlong into a thing without any policy. I was in hopes some of you would give us a definite policy in this matter, to tell us exactly what you would do with this money. We are told we have millions of acres now unprotected, and still we are told to go ahead and buy large tracts of land in addition to that we now have.

Mr. HALL. I should like to run down these millions of acres that are now unprotected that belong to the Federal Government.

The CHAIRMAN. Run them down?

Mr. HALL. Yes; I should like to see where they are. I do not think we have got them. I hope the committee will go further and dig out the facts.

The CHAIRMAN. I understood you to say that we were protected to the extent of 75 per cent. I think you went considerably further than anybody else, but you admit they are protected only to the extent of 75 per cent. That is your own statement.

Mr. HALL: Yes.

The CHAIRMAN. That is what I understood.

Mr. HALL. Now, why is it necessary to go into a plan of buying land to establish national forests at all? Why not depend on the fire protection that might be accomplished through action by the States and individual owners, with some help from the Federal Government? Because it is too uncertain. The history of privately owned timberlands in this country up until now has been that they have constantly got into worse condition. There have been examples, far apart, of men who have built their timberlands up, but they are not many. The rule is to let the timberlands go in the other direction. On the other hand, the timberlands in public hands have been improved. While they may not have been fully protected from fire they have been largely protected from fire.

There is another reason: Only on the national forests can we be sure that the trees can be held on the land long enough to reach a size to furnish the materials that we need.

Mr. KINCHELOE. Well, if this law were enacted and the forest States cooperated, you could control the cutting of the timber, could you not?

Mr. HALL. Possibly the time when timber is removed would be controlled.

Mr. KINCHELOE. I think this bill clearly gives the Secretary of Agriculture the right to make any plenary ruling he wants to in that regard.

Mr. HALL. Possibly it can be met in that way, but, as you know, many objections will intervene.

Mr. KINCHELOE. I can see how the private owner would object, yes. I am not objecting to the public aid being extended.

Mr. HALL. When you come to tell the private owner what he shall do, and what he shall not do, you have a difficult problem to work out.

Mr. KINCHELOE. That is why I am uncertain as to the provisions of this bill with reference to the reforestation of private lands.

Mr. HALL. There may be grounds for uncertainty in that respect. We know that timber can be held on public grounds.

Mr. KINCHELOE. Surely.

Mr. HALL. That is one reason why we need Federal aid.

And there is another reason: We need these forests scattered all over the forest regions because of the examples they will furnish of the proper way to handle forests. One of the great benefits that have come from the reserves in the Appalachian Mountains has been the examples furnished by these demonstration areas. They have tended to interest the States in forest conservation. They have been to some extent an example to private owners in that same way. They have established a nucleus of a fire protection system, and my belief is that we can not introduce into the great forest regions such as the South and the Lake States complete fire protection until we have areas of fire protection scattered throughout those States, which shall become the centers of protection. So for all of these reasons I regard this as essential.

Mr. KINCHELOE. I have just gone over my files. I have the impression, somehow, I do not know just where I got it, but I am sure I know that the State of Kentucky did have a State forester at one time, and I am of the opinion that the State legislature repealed that law. Do you know anything about that?

Mr. HALL. Yes; I think that is so.

Mr. KINCHELOE. That is my impression gained from going over my files, that that law has been repealed.

Mr. HALL. Yes; Kentucky is one State that, after having made a start with a forest policy, abandoned it, but I do not know the reasons.

Mr. KINCHELOE. That is what I would like to know.

Mr. HALL. Now, what should be our plan of developing the forests by purchase? Until now purchases have been limited to the southern Appalachian Mountains, and the White Mountains of New England, and in a small way to the Ozarks of Arkansas. We can do nothing better, I think, than to follow the policy which we have adopted—adopted in 1911—and complete that program, and to follow the advice that Forester Greeley has laid down in his annual report. And he has made the next steps very clear in that matter. We do not need in this matter to wait the result of further investigations. We have got a lot of information, all the information that we need to take the next steps, and for several years to come, and as we go ahead with the work we gather more information. We are ready, and this scheme should be carried out.

Now, Col. Greeley says, to quote him accurately, in his annual report:

"The three specific things the Government should endeavor to accomplish in its program of forest purchases are:

"(1) To complete the acquisition of areas having an important relation to the control of erosion and regulation of navigable streams.

"(2) To acquire for the future national supply of forest products timber-growing lands, chiefly denuded or cut over, which are located in the forest regions having the greatest importance from geographic location and productive possibilities. These should include a large proportion of lands whose reforestation will be difficult and expensive, which therefore should be a public rather than a private obligation.

"(3) To establish in the major forest regions now lacking them national forests which will serve as demonstration areas of forestry practice. The attainment of these ends requires the removal of the present limitation upon purchases to areas within watersheds of navigable streams, in recognition of a national obligation to aid in the production of timber on forest lands generally.

"This enlarged program would involve (1) the acquisition of approximately 3,000,000 acres on important watersheds in the eastern States, within acquisition areas previously established by the commission and such new areas as may be found desirable, at an average cost not exceeding \$8.50 per acre."

Now, the present cost for the land alone on lands acquired has been \$5.06, and I regard Col. Greeley's estimate here of \$8.50 per acre for the additional lands that may be needed as conservative.

He continues:

"And (2) the acquisition of approximately 7,000,000 acres without special reference to the watersheds of navigable streams, but comprising chiefly lands which will not be reforested except under public ownership. The average cost of such areas would probably be within \$3.50 per acre. The total cost of such a program, which would require from 5 to 10 years for accomplishment, would be \$50,000,000."

I shall now turn to the appropriation which is mentioned in these two sections, and which, as you will recall, is \$10,000,000 a year for five years, or \$50,000,000. I myself do not believe there is necessity of appropriations on that scale at this time, and I would not urge that upon the committee.

Mr. KELLOGG. There is a total of \$50,000,000?

Mr. HALL. Yes.

Mr. KELLOGG. And not \$10,000,000 a year.

Mr. HALL. Very well; then I was mistaken about that.

Mr. JONES. It provides in such amounts as might be required.

Mr. HALL. Yes; I would approach the problem in this way: We have at the present time, in the current appropriation made at the last session of Congress, an appropriation of \$1,000,000. The appropriation in the past years, before the war, were \$2,000,000 a year. I believe it would be wise for authority to be given for an appropriation of \$2,000,000 for the next fiscal year 1923. That is proposed in the Wason bill, upon which you have already arranged to give a later hearing.

I should like to see this work carried on from where we are now and greatly increased up to a scale that we may then decide it ought to be run along up, and not jump up in a very decided way in any one year. My own belief is that we should increase the appropriation from \$1,000,000 this year to \$2,000,000 next year, and for about five years increase the appropriation \$1,000,000 a year, which would then lead us to an expenditure of \$7,000,000 a year, at which rate I believe lands can be bought as fast as they would be available for purchase under this plan, and I think at that rate we would need to keep on for perhaps 35 or 40 years before we finally brought into the public hands all the lands that will be needed.

But that is not a question for us to decide to-day. The next generation will answer that question. The thing for us to do is to do our part now. And I believe in beginning on the foundation that we have laid and increasing the matter gradually. And the thing that I want to urge specially upon the committee is just that, leaving no gap in the work which is now going on, making an appropriation of \$2,000,000 for the year 1923, and then gradually increasing that up to the point where we are able to acquire the lands in acreage as they are needed.

Mr. JONES. Do you not think that the problem is being pretty well handled with the present appropriations, and with the present personnel under the present law, with the appropriations that are made?

Mr. HALL. So far as purchases are concerned, no further legislation is necessary, except as to extending the purchases beyond the watersheds of navigable streams. That is the one amendment in legislation that is proposed.

Mr. JONES. Well, in so far as the Government can secure consent of the different States to cooperate without bringing pressure to bear on them, they can now secure such policy as may be deemed necessary in carrying out the conservation policy and ideas in the different States.

Mr. HALL. Yes. In the policy of purchase there is one condition that ought to be, in my judgment, rigidly observed. The present act makes it necessary, before the Federal Government acquires any land in a State, that the State, through its legislature, sanctions that activity on the part of the Federal Government. And I believe that the Federal Government should not attempt to make purchases in any State until that State has considered the matter and decided whether it wants to handle its forestry problem by itself, or whether it wants to give authority for the Federal Government to go ahead. I think that is the right program to follow.

The CHAIRMAN. Now, the program which you have laid down does not give any relief to the Middle West. It simply proposes to extend this service and to expend this money as in the past.

Mr. HALL. No; I would extend this to the Middle States.

The CHAIRMAN. But the program that you have suggested—the one spoken of by Col. Greeley in his report—and I take it that is the program that would be followed up—

Mr. HALL (interposing). Are you referring now to purchases?

The CHAIRMAN. Yes.

Mr. HALL. No, sir; I would not now longer confine it to the East. Already the National Forest Reservation Commission is authorized to extend the purchases to Arkansas. I think the purchases should be extended to the Ozark region in Missouri, to certain regions in the rougher portions of Ohio, and certainly to Kentucky—Kentucky has already authorized purchases, and some of the most important forest lands of the country are there. It ought to be extended to a good many States, the States first considering the problem whether they want to handle it themselves.

The CHAIRMAN. But none of the places mentioned are available to the Western States—the prairie States; the freight rates are against it.

Mr. HALL. It is a serious question in my mind whether it is ever going to be feasible to grow in your State of Iowa the timber for its use, except in a very limited way.

The CHAIRMAN. Can you grow it in Wisconsin or Minnesota; that is closer?

Mr. HALL. Absolutely; yes.

The CHAIRMAN. To what extent? I understand all of these timberlands are being cleared, and the lands are most excellent lands for agriculture.

Mr. HALL. Mr. Campbell, of Wisconsin, made the statement yesterday that there are about 3,000,000 acres in Wisconsin that are especially adaptable to the growing of forests. I think there are larger acreages in Michigan, and also in Minnesota. My own belief is that when the problem is studied in Wisconsin it will be found that it is not 3,000,000 acres but much more that is adaptable to the growing of forests.

In Illinois there has been a carefully worked out soil survey, covering more than two-thirds of the counties in the State, which survey indicates that there are between 5,000,000 and 6,000,000 acres in that State which the soil survey has shown are not adaptable to tillage under the present methods. That is to say, if it is used at all it will have to be used for tree growing; and, undoubtedly, there will be a great deal of orcharding, and there are also large acreages that will be doubtless devoted to pasturage. And a further study must be made to determine what particular parts can be best devoted to pasturage, and what to horticulture, and what should be planted in timber. That study is going on now, and at the next meeting of the Legislature of Illinois a program will be presented as to the proper use of that 5,000,000 acres.

Mr. KINCHELOE. You speak of the forest lands of Kentucky. You are speaking, I assume, of the mountain lands?

Mr. HALL. Yes, sir.

Mr. KINCHELOE. How many acres are there, if you know, in that—

Mr. HALL (interposing). I do not know.

Mr. KINCHELOE. If the Government should buy that land, they will have to buy the surface.

Mr. HALL. Yes; presumably so, although in almost all of the purchases the Government has made, it has bought some lumber, having bought some 4,000,000,000 feet of lumber, in its purchases.

Mr. KINCHELOE. Of course, that is a hardwood section.

Mr. HALL. Of course, naturally in coal lands, and oil lands, all those rights would be reserved.

Mr. KINCHELOE. That wood is principally white oak?

Mr. HALL. White oak and hardwood.

I think that completes my statement, Mr. Chairman, and I thank you.

The CHAIRMAN. We are very much obliged to you.

Mr. SNELL. Mr. Chairman, I now desire to introduce Mr. Philip W. Ayres, forester of the Society for Protection of New Hampshire Forests.

The CHAIRMAN. We will hear Mr. Ayres.

STATEMENT OF MR. PHILIP W. AYRES, FORESTER OF THE SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS.

Mr. AYRES. Mr. Chairman and gentlemen, I presume the reason I appear before you is in order that I may show what has been done in the White Mountains as an example of the policy which this bill proposes, and if it is agreeable to you and the other gentlemen, I think I can do so quite briefly.

The Weeks law was passed in 1911, and was signed by President Taft, in that year. It authorized the creation of the Forest Reservation Commission, to be made up of three members of the Cabinet, and two Members of the House of Representatives, and two Members of the Senate. That commission determined, at its first meeting, that in view of the fact that the watersheds of the White Mountains were the steepest of any, not barring the West, that a beginning of this work should be made in the eastern mountains, and for the most part it was confined to the East, all purchases having been made in 10 States, since the States have themselves passed an enabling act, inviting the Government to come in. The Northern States that have passed these acts are New Hampshire and Maine, and under this act there have been acquired 440,000 acres of lands—400,000 acres in New Hampshire, and 40,000 acres in Maine, being contiguous lands, at an average price that is a little over \$6 an acre.

The average price in the North and South has been \$5.4 an acre, and the purchases in the Southern States have been at a price in the neighborhood of \$5 an acre, or perhaps a trifle less than \$5.

The original plan that was laid out by the Government engineers when this bill was passed, contemplated very nearly a million acres in the States of New Hampshire and Maine. Now, just 46 per cent of that program has been carried out in the now nearly 11 years since the bill was passed and went into operation.

In the Southern States 26 per cent of the original plan has been carried out.

And we feel that an exceedingly wise and admirable bargain has been made by the Government, in view of the fact that all of these forests in the White Mountains have already, in these short years, become self-supporting, and are returning now a revenue to the Government, in a small way, to be sure, and also to the State of New Hampshire. As you know, under the law, 25 per cent of the returns from sales of timber is turned over to the States in which the sales are made, in lieu of taxes; and, under that provision of the law, there was just a little over \$26,000 returned to the State of New Hampshire last year. That was turned over to the States, and by the approval of the governor and his council, \$4,000 was assigned to the towns in which the timber was cut, and \$4,000 to the State fund for education, and an amount was also turned over to the State highway department for the purpose of helping the highways and roads of the State.

So, you see that it has already begun to prove for the State of New Hampshire, in which the forest is located, a matter in which the towns can not complain because the Government takes away the land and the taxes are not returned.

And I have also learned with satisfaction that the Pisgah Forest in the southern mountains is already self-supporting, in like manner. And we are credibly informed that, owing to the increase in stumpage values, that the land, which the Government has acquired throughout the East, could be sold at an advance of 50 per cent over all cost to the Government, and perhaps 100 per cent, and that, therefore, it has proved an exceedingly excellent bar-

gain for the Government. And we feel that as these forests become further self-supporting that the revenue to the Government will be very, very much larger.

The Government has purchased in New Hampshire 400,000 acres of cut-over land for the most part.

We had a severe trial with the agents of the Government, in inducing them to change from a policy of purchasing cut-over lands only, which policy they did change, and have been buying untouched lands, for two reasons: Our lands are at the highest part of the mountains, and better timber could be obtained there than if the Government bought only the cut-over lands in the valleys. In the second place, we were able to show to the Government that if they bought the land on these mountains, they would be able to make it self-supporting in a few years, and make it a business proposition, and show, as we are showing to you now, that it is a safe thing for the Government to own forests, if it does not restrict itself to cut-over lands.

The CHAIRMAN. Do you contend if this policy were followed that it could be self-supporting?

Mr. AYRES. In time it would be very much more than self-supporting, just as now in the foreign countries there is a large return in revenue to the States and counties and towns in which these forests are located.

The CHAIRMAN. It is far from being self-supporting now.

Mr. AYRES. It is so in the White Mountains, and it is so in the Pisgah Forest.

The CHAIRMAN. Probably they bought timber and sold it off.

Mr. AYRES. Let me explain to you—

The CHAIRMAN (interposing). Is it not a fact that the Government pays large taxes to the State in paying the States 25 per cent of sales?

Mr. AYRES. I think myself that it is very generous. Of course, we are very glad to get it, and do not object to it.

The CHAIRMAN. Speaking of the general proposition, do you contend it is self-supporting?

Mr. AYRES. It is self-supporting.

The CHAIRMAN. You mean just this one?

Mr. AYRES. Yes.

The CHAIRMAN. They come for large appropriations.

Mr. AYRES. We have not come for several years.

The CHAIRMAN. You do not mean the Forest Service?

Mr. AYRES. Oh, no; I beg your pardon; I mean the forest in the White Mountains is self-supporting.

Mr. McLAUGHLIN of Michigan. How do you get the money—from selling timber?

Mr. AYRES. Chiefly from selling timber. And that has been done with extreme wisdom, in view of the fact that several portions of it have been set apart for recreational purposes and other portions for protection; and in the remainder of the forest they have been making sales, where they could relieve the undergrowth and take out the overgrowth and thus benefit the forest.

Mr. McLAUGHLIN of Michigan. Are there any grazing lands in there?

Mr. AYRES. I think there are practically no grazing lands in the forests in the eastern mountains. Our watersheds are too steep, and the possibility of producing a forest quickly where the rainfall is not great makes it desirable to conserve vegetation, which is not true of the Middle States, and the condition I mention makes it undesirable in forests that it should be used for grazing.

Mr. McLAUGHLIN of Michigan. Is there a charge made for the uses of the land for recreational purposes?

Mr. AYRES. Oh, yes; the Government makes a small charge. That has yielded some revenue. But the larger part of the revenue—I should say 90 per cent of the revenue—has been from the sale of timber.

Mr. KINCHELOE. What did those timbered lands cost the Government?

Mr. AYRES. The price which the Government has paid for all lands has been a trifle over \$6 an acre.

Mr. KINCHELOE. That is the average?

Mr. AYRES. Yes, sir. The highest price paid was \$6.20 an acre; that is where it was timbered.

Mr. KINCHELOE. And that is where you got your revenue—from that part which was timbered which the Government bought?

Mr. AYRES. Yes, sir.

Mr. KINCHELOE. Your hazard from fire is not nearly as great as it is in the West, is it?

Mr. AYRES. We have great hazards from fire. And before it was put under fire protection we had 300,000 acres that burned over in 1893, and we have had 200,000 acres burned over more recently. The damage from fire is much greater than on most lands, because the soil itself is of a vegetable composition, and when a fire passes over it it is rendered largely barren, and is crippled. A fire in our mountains is a very serious thing, because it injures the capacity of the soil, which makes it a more serious matter.

The CHAIRMAN. I do not have the latest figures, but the figures a few years ago showed that the total expenditures were nine million two hundred and eighty-five thousand and some odd dollars, and the total receipts were four million eight hundred and sixty thousand and some odd dollars, or a deficit of over \$4,000,000. That includes, of course, the 25 per cent that went to schools and the 10 per cent to roads.

Mr. AYRES. You are speaking of the National Forest Service as a whole, are you not?

The CHAIRMAN. Yes; I am speaking of the Forest Service as a whole.

Mr. AYRES. You see, the national forest policy could quickly sweep that off, and change all that if it were seen wise to do so.

The CHAIRMAN. The Government pays the expenses and turns over the revenues, and makes up the deficit in excess of the revenues by making large appropriations.

Mr. AYRES. I think this may interest you: When the Weeks bill was first passed it gave 5 per cent to the States in lieu of all taxes. We accepted that as reasonable—well, it was in the bill and, of course, we accepted it. And later, in order to make it uniform in all the States where it was required, that was changed, and instead of the 5 per cent it was made 25 per cent of the gross returns that would be returned to the States. We are very much gratified, and along with the others we will keep it if nobody tries to take it away from us.

The CHAIRMAN. The question is, can it be made self-supporting; if not, how much is it going to cost us? Can you give us an estimate?

Mr. AYRES. I am not familiar with the forests outside of my own territory, and do not know that I am capable of giving that estimate.

The CHAIRMAN. Of course, the forester is not responsible for that condition. If it was not for the money that it paid over to the States, it could be made self-supporting. Congress has interfered with the program and paid out more than it should to the States.

Mr. AYRES. My own view of that is that the payment of 25 per cent of the gross sales to the States in which the timber stands—in the western States—they are a little jealous, and this helps them to say that it is of great benefit.

Mr. KINCHELOE. If the fire hazards are as great in New Hampshire as they are in the West, how is it that it yields a revenue there, and in other places there is a deficit?

Mr. AYRES. The character of our timber, and—

Mr. KINCHELOE (interposing). I know, but you have not grown a forest up there in 10 years. I understand you to say that you yield a surplus to the Treasury, while the facts show that the system as a whole has a great deficit, yielding only about 50 per cent of its expenditures. What I am talking about, in what way do you get your revenue that is different from the West?

Mr. AYRES. Our areas are much smaller and our expense is less.

Mr. KINCHELOE. And the timber sell would be less also?

Mr. AYRES. Yes, sir.

Mr. McLAUGHLIN of Michigan. But there is a market for all of it right at home.

Mr. AYRES. Yes; thank you, Mr. McLaughlin. We have a market for all of our timber right at our own doors.

Mr. KINCHELOE. And isn't it also attributable to the fact that there was some good timber on it when you bought it?

Mr. AYRES. A good many of our acres were timbered, but some of it had been culled.

Mr. KINCHELOE. And, therefore, you had more timber to sell?

Mr. AYRES. I think it is due to the wisdom of the Government in buying some timbered lands, and that wisdom enables us to make a showing much sooner.

The CHAIRMAN. Let us see about that: The Government has bought timber and sold it, but not at enough profit to pay its expenses. In other words, the lumber it sold has not paid for the protection and expenses in disposing of it.

Mr. AYRES. I believe the time will come, Mr. Chairman, when the forest in the White Mountains will return to the Government more than it has cost the Government, interest and everything. As I intimated awhile ago, the Government could sell its entire holdings today at an advance of 100 per cent over the cost.

Mr. KINCHELOE. Then if this bill were passed, do you think that it would be a good thing to try to grow the hardwoods in the eastern part of the United States?

Mr. AYRES. To grow the hardwood—

Mr. KINCHELOE (interposing). In the eastern part of the United States?

Mr. AYRES. I doubt that. In the Appalachian forests there is the hardwood on the top of the mountain and the softer woods at the sides.

Mr. KINCHELOE. The point I am making, is that if the Government makes more out of its investment in the lands in the eastern part of the United States it would be better to have it in the East.

Mr. AYRES. We are gratified to think that you think of that, and we are grateful to you for suggesting it. But I think they should buy lands in the West and in the East also.

Col. Greeley's report shows that there is one-sixth of the standing timber east of the Rocky Mountains, where five-sixths of the people of the country are competing for it, and with ever increasing scarcity and ever increasing rates for its transportation, it seems to me it would be an exceedingly wise policy to acquire land to grow the forests where the people are, if the lands can be secured for the purpose.

Mr. KINCHELOE. You think the character of the timber should enter into it?

Mr. AYRES. I believe we can grow in the White Mountains timber as good as that which can be grown in the West.

Mr. KINCHELOE. Speaking of geography, I come from a State that grows as good hardwood as any place in the country.

Mr. AYRES. Certainly, that is true. They grow very fine hardwoods in Kentucky.

May I answer one question that was asked by you yesterday, and that is whether these gentlemen who came from the West were willing to trust to the Government the making of specific regulations that should be put upon their property?

Mr. KINCHELOE. Yes; and they said they were not. What do you say?

Mr. AYRES. Let me tell you this: When the Weeks law was first proposed, there was a great deal of hubbub created throughout the Eastern States, because it was proposed to give the Secretary of Agriculture complete authority, and if he had seen fit he could have swept off all the timber in any section of the country. The chambers of commerce in the New England States said, "Are you willing to put all this authority in the hands of the Secretary of Agriculture?"

Mr. KINCHELOE. I was asking these gentlemen who are private owners of lands about that yesterday. Of course, they are willing to be the beneficiaries of the appropriations, and I asked them if they would be willing to submit to the same regulations as the Secretary of Agriculture prescribes for the Government reservations, and they said they were not.

Mr. AYRES. I think eventually we shall have to have in this country uniform regulations, as they now have in the other countries.

Mr. KINCHELOE. Don't you think that if there is an appropriation for the purposes of making these gentlemen the beneficiaries in reforestation and fire protection, etc., that they should be subject to regulations?

Mr. AYRES. I have failed to see so far in this discussion what the benefits to these western owners are to be. I do not see in this bill that these fellows are to be so much benefited.

Mr. KINCHELOE. You mean the private owners?

Mr. AYRES. The private owners; yes.

Mr. KINCHELOE. Under this bill, if it is passed, you assist the private owners in the States in reforestation, and everything else that looks to the preservation of timber.

Mr. AYRES. That is a little out of my line of thought, and out of my line of study. The answer I wanted to make to your questions of yesterday was that

we could trust the Forest Service, and these 12 years that have passed since the passage of the Weeks law proves that we can do it.

Mr. KINCHELOE. Your people were apprehensive that the Forest Service would cut all the timber off?

Mr. AYRES. Yes, sir.

Mr. KINCHELOE. They could specify which specific trees they should cut, and so on, and the point I was making was whether they would be willing to submit to such regulations.

Mr. AYRES. It was pointed out by Col. Greeley up in the White Mountains a few years ago, that he did not think it would be practical to put the same severe regulations on the private owners as could be put on the Government lands.

Mr. KINCHELOE. That is probably true.

Mr. AYRES. I think it would be subject to some restrictions, but my only object in bringing it up at all of this time was to say that I believe that we could trust the Secretary of Agriculture, and we have trusted him, and the faith we have put in him has never been violated.

Mr. KINCHELOE. I can not see why, if you give them the benefits in their forests, why the private owners of these timberlands should not preserve theirs, in keeping theirs the same as the Government.

Mr. AYRES. If they could afford to hold their lands for 100 years, I think that would be true.

Mr. KINCHELOE. I don't think they will, without a subsidy.

Mr. AYRES. There is one matter that bears strongly on my mind, and if I may I would like to express it. And it is that we are confronted with the proposition that five-sixths of the people are competing for one-sixth of the timber, and all of the witnesses that have appeared before you have agreed that we are approaching a serious situation and that we may look forward to a shortage. The Government, to meet that shortage, has taken just one step, namely, in 1911 it has passed the Weeks Act. It has not passed a policy of reforestation, and it would take some time to get such a policy in operation.

Now, to create that policy. The Government has the opportunity now of purchasing land, and it can be purchased at this time at the utmost low prices; lower than any land that has been bought in the last 10 years, for the reason that a number of companies throughout Pennsylvania and several other States—this does not apply to New England—have landed more or less on the rocks during the last depression and now are offering their lands for sale in Kentucky and Georgia and North Carolina and other States at prices which range from \$2.20 an acre up to \$4.50 an acre.

Now, the Government is not in position to enter into competition with the private people who could doubtless acquire this land, and if the policy of the Government is to acquire land in these areas, and if the Government is going to carry on this policy, it seems to me essential now—at this time—that the money should be forthcoming for them to do it.

The CHAIRMAN. Now, granting that these people are right, and that the Government would pursue a wise policy, how much money is it going to require to carry out the policy, and how soon can we expect them to do something for us in the West, if feasible?

Mr. AYRES. I think it will benefit the West by getting these eastern mountains reforested, because Iowa is exactly half as far from this supply as from the—

The CHAIRMAN (interposing). We can get it from Canada.

Mr. AYRES. But we are told that the supplies are limited there, and we can not look to them very much longer. And the Canadian people will doubtless stop the use of their timber, just as they have by the restriction of pulp-wood exports, and already millions and millions of American capital has gone into Canadian pulp and paper operations during the last 10 years.

The CHAIRMAN. We have been told for years that Canada would not let us have any more, but they are still selling it to us.

Mr. AYRES. And I also believe there isn't very much hardwood in Canada, anyway.

The CHAIRMAN. But there is some in Wisconsin.

Mr. AYRES. Yes; and I am glad of it.

The CHAIRMAN. I am not criticizing what has been done, but I am concerned about the future policy, and whether we could look for it to benefit us out west.

Mr. AYRES. In closing, let me say that the time has come that we must decide as a policy whether we will continue or discontinue reforestation. The

Weeks law made a beginning, and the Government has appropriated the following sums at the following times—

The CHAIRMAN (interposing). Let us see if we can not agree on this. Can we not agree on some policies?

Mr. AYRES. I believe so, and it is for that reason I appear before you. In my judgment the policy should be to finish the work which has been begun in the eastern mountains.

The CHAIRMAN. How long will it take, and how much money?

Mr. AYRES. I believe \$50,000,000, all told, would be sufficient, and the Government has now put in \$15,500,000.

The CHAIRMAN. It has got to be \$50,000,000 in addition to the amount already expended?

Mr. AYRES. No, sir; I just stated otherwise.

The CHAIRMAN. I remember the Weeks bill; it does not seem to take care of the proposition.

Mr. AYRES. It has taken care of 46 per cent of it in the White Mountains, and I think that it a good beginning.

The CHAIRMAN. But that is only one of the projects to be undertaken.

Mr. AYRES. My opinion is that the project begun in 1911, and which is half finished in the White Mountains, and a project which is one-third finished in the South, is something that the Government has done. But the present policy of giving us \$1,000,000 a year, or \$2,000,000 a year, is one which merely results in the Government losing its best personnel, and I am sorry to say that some of the best agents which the Government has had have left the Government service. Permit me to be specific, and mention a name: Maj. Hall, who spoke just before me, is a man who under the Weeks law expended \$10,000,000, without a stain on his hands, and he is no longer in the Forest Service. And I submit that the present policy is one by which the best men are lost to the Government because they can get better jobs outside of the Government service. That is the present policy, Mr. Chairman, as I know it, and it seems to me we either want to decide it is wrong and stop it, or else deliberately say it is a good thing and continue it. I thank you, Mr. Chairman and gentlemen.

The CHAIRMAN. We are much obliged to you for your statement, Mr. Ayres.

Mr. SNELL. Mr. Chairman, I now desire to introduce Mr. Huntington Taylor, general manager of the Edward Rutledge Timber Co., and secretary-treasurer of the Cœur d'Alene Timber Protective Association, of Cœur d'Alene, Idaho. That is about as far west as we could go.

The CHAIRMAN. We will hear Mr. Taylor.

**STATEMENT OF MR. HUNTINGTON TAYLOR, GENERAL MANAGER
EDWARD RUTLEDGE TIMBER CO., AND SECRETARY-TREASURER
COEUR D' ALENE TIMBER PROTECTIVE ASSOCIATION, COEUR D'
ALENE, IDAHO.**

Mr. TAYLOR. I have been asked, Mr. Chairman and gentlemen, to speak on the land-exchange features of this bill, but in order to get to that, it is first necessary for me to take up the question of fire protection, which in Idaho is one of the main cooperative features of our work. For the last 20 years there has been an agitation for the forestry idea, that has resulted first in the establishment of the national forests, and, second, in an enormous expansion in the idea of cooperative fire protection by the private owner and the State. In the State of Idaho we have a law by which the State must belong to an association in proportion to the acreage that it has in the area of any given association. There are five or six associations in the State of Idaho.

I will read you just an extract from the law. It is as follows [reading]:

"Section 8 of act of 1909: The State Board of Land Commissioners of the State of Idaho shall in all things cooperate with the owners of land, timber, or other property in this State in carrying out the provisions and purposes of this act, and the State of Idaho shall bear and pay its proper pro rata share of the costs and expenses of protecting the lands and timber in the State against destruction by fire incurred under the provisions of this act according to the area and extent of its land and timber holdings throughout the several fire districts of the State, and the State of Idaho shall be considered an owner of land or other property within the meaning of that term as used in this act, for the purposes of this act. Such moneys as the State shall thus become liable for shall be paid as part of the general expenses of the State Board of Land Commissioners and out of the appropriations which shall be made by

the legislature for that purpose; and in all appropriations hereafter made for general expenses of said board account shall be taken of, and provisions made for, this item of expense."

This, you will note, is from the act of 1909, some time back in this kind of work.

I am also secretary and treasurer of the Coeur d' Alene Timber Protective Association, which is a fire-protective association, and is one of the fire-protective associations of the State of Idaho. I would like to read you the first article, name and object of the constitution, and by-laws of the Coeur d' Alene Timber Protective Association, which was adopted in 1906. I read this simply to show the cooperative idea and how far it had developed at that time.

The article is as follows [reading]:

"The name of this association shall be Coeur d' Alene Timber Protective Association, and its object the preservation of the forests of Idaho generally, and the district tributary to Coeur d'Alene Lake particularly, from loss of fire, and to enlist the aid of the United States and State government in said work. Also such other matters as may be of mutual interest to its members, and to encourage the enactment of such laws as will best conserve the objects to be attained."

I have here a few copies of the report for 1920 of that association, which I should like to give you, as it may give you some idea of the work of our association, and because it gives the cost per acre of fighting fires since 1906.

I have also here copies of the Fallon fire law, which you may want to look over at your leisure.

I want to say that I came across, by accident, the number of acres of public domain, which are in five townships within the area of this particular association. There are 29,000 acres of public domain which are protecting from fire each year, and for which the United States Government does not pay one cent. In fact, the acreage within the limits of our association is practically double the acreage shown in that report, but the private owners of the State, who voluntarily get together, bear the whole expense.

I want also to say that cut-over lands, which we consider a menace—cut-over lands are charged exactly the same rate as the merchantable timber. In other words, whether the land is cut over or whether it is timber, it makes no difference.

Mr. KINCHELOE. How much does the State legislature appropriate annually for fire protection?

Mr. TAYLOR. They appropriate whatever it costs the different associations per acre for the land that is within the area or district of that particular association.

Mr. KINCHELOE. How much did they appropriate last year?

Mr. TAYLOR. I can't give you the exact figures, but somewhere around \$50,000. The State has about 700,000 acres, 97 per cent of which is within these association limits.

Mr. KINCHELOE. How much forest reserve has the Government in the State of Idaho?

Mr. TAYLOR. About 60 per cent of the total timber lands in northern Idaho.

Mr. KINCHELOE. Then it has more than the State has?

Mr. TAYLOR. Yes; I can give you some figures on that. Of standing timber in the State of Idaho, in private ownership, about 40 per cent; Government ownership, 50 per cent; and State ownership, 10 per cent.

Mr. KINCHELOE. How is it that your State does not get any of this appropriation?

Mr. TAYLOR. We do get in on it under the Weeks law. A great deal of our timber is at the heads of navigable streams, and we get in in that way.

Mr. McLAUGHLIN of Michigan. That is for fire protection?

Mr. TAYLOR. Yes, sir.

Mr. McLAUGHLIN of Michigan. You get a piece of it in that way?

Mr. TAYLOR. Yes, sir.

Mr. KINCHELOE. That is what I asked you, and I understood you to say it did not cost the Government a cent.

Mr. TAYLOR. No; that is within the area or domain of our fire-protective association. That is just in the five townships that I mentioned.

Mr. McLAUGHLIN of Michigan. That was in the five townships that he mentioned, in his fire-protective association.

Mr. TAYLOR. That was in those five townships that I said there was practically 29,000 acres within the area of our protective association, which we pro-

ected and for which the Government pays nothing. We protect that just as we protect any other land in that rea, as a matter of protection for ourselves.

Mr. McLAUGHLIN of Michigan. Generally speaking, the public domain is land outside of those limits?

Mr. TAYLOR. Yes. Thank you, Mr. McLaughlin. I thought you understood that.

Now, the Forest Service, in the beginning, getting the Forest Service into shape—the forests that were first created took most of the time of the Forest Service and took their attention from other forestry matters at that time. The area of these national forests, as I understand, has been shown not to be enough. Therefore there must be more and larger area, and also we feel that there must be forestation on private land.

I think the question will come up, and, anyway, I would like to at least give my thought as to a question that came up yesterday on the workings of this proposed bill.

In the first place, the Government is to put up money in proportion as the States put up money for reforestation work. The question was asked what check there would be on the amount that any State might get from the National Government. I am not sure whether you asked that question or not.

Mr. McLAUGHLIN of Michigan. It was Mr. Ten Eyck, of New York, who asked it.

Mr. TAYLOR. Yes; I think so. In the first place, you have the check due to the fact that the State is certainly not going to fall over itself to give money to anyone for the sake of getting that same money back from the Government.

Secondly, you have the check of the Forest Service, which, in my experience, is such that they are plenty able to take care of themselves.

Thirdly, you have the check that if the State of Idaho, for instance, got more than its share this year you are certainly going to hear from it, and the other States will see that we do not get it next year.

I think you will agree with me that this is a pretty generally automatic proposition.

Mr. KINCHELOE. The first thing about it is the administration of this law. Suppose the State of Idaho should put up 50 per cent of the appropriation, is there anything in the law that would give a reason to the Agricultural Department for refusing their request? What Mr. Ten Eyck had in mind was a check on the amount to be expended in any one State.

Mr. TAYLOR. Well, there would be the check that I referred to here, the check as to whether or not Idaho was entitled to this for work actually done. That would be checked by the Forest Service absolutely. The Forest Service would not recommend to the Secretary of Agriculture that the State of Idaho should get any money unless it had done the work which was directly in accordance with the idea of what should be done in order to get the money.

Mr. McLAUGHLIN of Michigan. Well, under this bill Idaho would not get any money unless it had appropriated and used an equal amount of money.

Mr. TAYLOR. No.

Mr. McLAUGHLIN of Michigan. But under this bill the State of Idaho might appropriate a great lot of money and get nothing from the Federal Government?

Mr. TAYLOR. Well, that might be absolutely true, Mr. McLaughlin, unless they did the work in such a way as the Federal Forest Service thought necessary.

Mr. McLAUGHLIN of Michigan. There is nothing in this bill to direct the Secretary of Agriculture to expend money in any State; there is a direction to him that he shall not spend in excess of the amount used by the State itself—appropriated and used by the State itself.

Mr. TAYLOR. That is true, Mr. McLaughlin. Of course, the understanding that I have of that, of the intention of the bill, is that the Federal Government puts up a certain amount of money. Now, I will not go into the wording of it, because I hardly think I am capable of it. But my understanding of it is this, that the Federal Government puts up a certain amount of money; Idaho does a certain amount of work, which would be, say, a certain proportion of the work done by all the States entitled to any of this money in the United States. Now, Idaho would get the proportion of the money which the Government put up as that proportion related to the work which she had done.

Mr. KINCHELOE. Supposing she had exceeded her appropriation under the State appropriation?

Mr. TAYLOR. She could not exceed her appropriation in the sense that if she did 10 per cent of the work that was done in the United States by the

States which were entitled to any of this she would get 10 per cent of the money which was put up.

Mr. KINCHELOE. Of course, the contention of Mr. Ten Eyck was at the time that there is nothing in this bill that fixes any standard of the distribution of this Government money to the various States. I don't think there is anything in this bill that fixes that. And as Mr. McLaughlin said yesterday, there is a provision in the Smith-Lever Act, and in the good roads bill, where every State knows to the red cent what they are going to get, provided they come up, of course, dollar for dollar with it.

Mr. TAYLOR. Well, the understanding that I have of the intention of this bill—and, as I say, it is useless for me to go into the wording of it—it is that the States would get from the total amount of money that was put up by the Government for this purpose the percentage which would be the percentage that they had done of this work, as O. K'd by the Forest Service, as proportioned by all the rest of the States combined.

Mr. McLAUGHLIN of Michigan. Don't you think there are some in which the work would not be done?

Mr. TAYLOR. They would not come in on the money.

Mr. McLAUGHLIN of Michigan. And the Secretary of Agriculture could expend the money appropriated by the Congress in any State that he pleased, and put the money where he pleased, but in no State is he to spend more money than the State itself would spend?

Mr. TAYLOR. Yes.

Mr. McLAUGHLIN of Michigan. That is all. He doesn't need to spend a dollar in Idaho regardless of the amount of money that Idaho spends, but if he does spend money in Idaho, he can not spend any more than Idaho does.

Mr. TAYLOR. Well, if the wording of the bill is such that it does not conform to the intent, why then the wording should be made to conform to the intent.

Mr. McLAUGHLIN of Michigan. All the bill says is that he shall not spend in Idaho more than Idaho spends.

Mr. TAYLOR. Well, then, it seems to me the wording should be made to conform to the intent.

Mr. KINCHELOE. That is the contention.

Mr. TAYLOR. Well then, the wording should be made to conform to the intent, sir. The intent is such as I have expressed, without any doubt, I think.

Mr. McLAUGHLIN of Michigan. Supposing the Congress did not appropriate money enough to pay the amount that itself uses, then what would you do?

Mr. TAYLOR. Well, I would say they were not following out a forest policy for the United States. That is what I should think. This is coming back to the proposition that if you are going to grow trees you should do it. If you are not going to grow trees, then don't do it.

Mr. McLAUGHLIN of Michigan. I was speaking of the purport and effect of the bill. It would be necessary it would seem to me, to do work in Idaho.

Mr. TAYLOR. Yes.

Mr. McLAUGHLIN of Michigan. And in all probability the Secretary would do work in Idaho.

Mr. TAYLOR. Yes.

Mr. McLAUGHLIN of Michigan. But he might refrain from doing it for reasons good and sufficient to himself, and Idaho, under this bill, would not have any right to claim anything because it had spent money. But if the Secretary undertakes to spend money in Idaho he is limited in the amount he could spend, that is, up to the amount that Idaho itself spends?

Mr. TAYLOR. Well, the wording of the bill should be changed so that a State that did work which was O. K'd by the Forest Service as being a proper work could get it.

Mr. McLAUGHLIN of Michigan. I don't see how you could do it, because you never knew how much the Congress is going to appropriate.

Mr. TAYLOR. It is all a matter of percentage and proportions anyway, sir.

Mr. KINCHELOE. Well, it might be, and it might not be, under this bill.

Mr. TAYLOR. I am speaking, Mr. Kincheloe, of the intent of the bill, as I understand it.

Mr. KINCHELOE. I might imagine that you need it in Idaho. I went through there once, and there were forests afire, and such great fires that I did not see how you could ever put them out.

Mr. TAYLOR. Well, we have hard work putting out the forest fires out there sometimes.

Mr. McLAUGHLIN of Michigan. I do not see how you can divide this money among the States in any such proportion. In some of the States, as was said, it seems to me there is no necessity for doing any reforestation at all. Now take the State from which the chairman of this committee comes; the land in that State is so valuable for agricultural purposes that they would not think of foresting it. They would not spend a dollar there. And there are some other States similarly situated.

Mr. TAYLOR. Well, Mr. McLaughlin, Iowa wants lumber some time, doesn't it?

Mr. McLAUGHLIN of Michigan. Well, let them get it from Michigan or from Minnesota.

Mr. TAYLOR. They won't get enough. Iowa won't get enough lumber from them. The basis of this whole thing is predicated on the fact that you are going to be up against a shortage of lumber, and that you have got to have more lumber for the future. Now, the State of Iowa; I don't know very much about it, but it is in the same position—

The CHAIRMAN (interposing). In the same position; pay taxes for all the people and get nothing out of it.

Mr. TAYLOR. Right at that point, Mr. Chairman, it would be a very easy matter for you to bring it up, but doesn't New York get a greater part of the immigration money than anybody else?

The CHAIRMAN. Yes.

Mr. McLAUGHLIN of Michigan. We all contribute to New York; we all contribute, but New York gets most of it.

The CHAIRMAN. What we have been expecting is this, that it might reach us some time.

Mr. TEN EYCK. I would like to say a word in reference to New York. If you adopt the system of forestry in all the other States that New York has established in its State, you won't need this bill.

Mr. TAYLOR. If you will permit me, I don't agree with you, Mr. Ten Eyck. I don't agree with you on one basis, and that is this—that only the National Forest Service can bring to each State the combined knowledge which it gets from all States. It is absolutely impossible for any single State to maintain a forest service that can do that, not even New York, which has so many more people in it than Idaho. Well, Idaho is about 80 per cent larger than New York in area, and New York has about 10,000,000 people more than Idaho has. We have lots of land and lots of work to do, and very few people. Now, I think if you will size those things all up in proportion, New York's amount won't look quite as large as it does to you at first.

Mr. TEN EYCK. No; what I meant to say was this, in all seriousness, that if the Government does on all the Federal lands in the country what New York State is doing on its forest land in New York State, and if all the other States do as much in their respective States as New York State this bill would not be necessary.

Mr. TAYLOR. Well, I am very glad you brought that out in that way, sir. I think if you were as familiar with our western country as I am, you would be inclined to modify that statement. In the West if you keep fire out you are going to have reproduction. Now, if you let this whole matter drift along until you get to the point where you have got to put a much heavier expense into growing trees, it is going to cost you more money in the long run than it is if you protect the cut-over lands in the West which are growing trees to-day.

Mr. KINCHELOE. How well are they protecting those lands that you speak of now?

Mr. TAYLOR. Well, sir, in Idaho we protect them through these fire associations.

Mr. KINCHELOE. You protect them through these fire associations. But I say how well protected are they?

Mr. TAYLOR. Very well protected, sir. We are mixed up with the Forest Service. Of course, we are used to dealing with those people all the time, because we are right next to them. The Forest Service has an area here that juts into some of ours, and we have an area over here that juts into theirs. We make what we call—what is the word I want, Mr. Greeley?

Mr. McLAUGHLIN of Michigan. You have a reciprocal relationship; is that what you mean?

Mr. TAYLOR. Yes; that is what it is, but that is not the expression that I was after. What is it, Mr. Greeley?

Mr. GREELEY. Cooperative area.

Mr. TAYLOR. Yes; we make what is called a cooperative area. The Forest Service says, "We will take care of this side." We say, "We will take care of this side." At the end of the season we will see what their bill is, and we will see what our bill is, and we will balance them off. If you will look in this report here you will see that, at the time this report was made out, we owed the United States Forest Service \$5,618.

The CHAIRMAN. How much does your State contribute toward this, Mr. Taylor?

Mr. TAYLOR. Our State contributes, Mr. Haugen, exactly the same.

The CHAIRMAN. The same?

Mr. TAYLOR. Yes.

The CHAIRMAN. In dollars and cents how much does your State contribute toward this?

Mr. TAYLOR. Oh, do you mean in all the fire associations?

The CHAIRMAN. I mean the State.

Mr. TAYLOR. I would say that last year it ran somewhere around \$50,000.

The CHAIRMAN. Yes; but the Federal Government pays your State three times that amount.

Mr. TAYLOR. Oh, no; what is that?

The CHAIRMAN. Yes; for schools and trails. I will give the amount: In 1919 \$115,767.60 for schools and \$46,307.04 for roads and trails—about \$160,000—and you spent only \$50,000. I notice from your remark that you said the Federal Government did not contribute anything.

Mr. TAYLOR. No; you misunderstood me, Mr. Haugen. I said that we protected, in our areas, public domain land, which has nothing to do with national forests; that the Government did not pay anything for. We protect those lands because they are within the area of our association.

The CHAIRMAN. Do you contend that the Federal Government should step in and protect your private land?

Mr. TAYLOR. No, sir; not in any sense. I just simply made that as a passing remark because it is a fact, that is all. I really said that merely to show that we protect all the lands in that area, irrespective of ownership, or irrespective of whether anybody pays for that except those that voluntarily belong to that association.

The CHAIRMAN. You cooperate with the Forest Service, do you?

Mr. TAYLOR. We cooperate with the Forest Service in every way.

The problem itself has become fairly well defined. It involves the transfer to Government ownership of a sufficient quantity of potential forest land to provide enough area in the aggregate, with what the Government already has, and the limited area that other owners can afford to keep under proper permanent management, to yield an annual crop at least equal to the Nation's annual consumption of forest products.

Mr. KINCHELOE. Are you doing any reforestation out there?

Mr. TAYLOR. Nothing except the fire protection, and about the fire protection in the West, I would like to, right at this point, say what I think the 75 per cent which has been mentioned means, myself personally. It means 75 per cent of the work necessary to regrow enough trees, irrespective of the ownership of the land.

Mr. KINCHELOE. Well, the other witnesses said that fire protection was 75 per cent of the solution of the whole proposition.

Mr. TAYLOR. Well, does not that mean the same thing, Mr. Kincheloe?

Mr. KINCHELOE. Well, I don't know; that is what they said. They said that fire protection was 75 per cent of the solution of the whole proposition.

Mr. TAYLOR. Yes. You referred, Mr. Haugen, at one time, to the cutting of fire trails.

The CHAIRMAN. To what?

Mr. TAYLOR. The cutting of fire trails. It reminded me that two years ago we had a fire to which I took 120 men and a bunch of pack mules, and it took us two days to cut a trail to that fire with those men. Now we are opening up the five trails just as fast as we can, so that we can reach each part of those, but that kind of a trail is not a menace; it is a very valuable asset.

The CHAIRMAN. I happen to know something about fighting fires; I have fought them.

Mr. TAYLOR. Well, I have, too.

Factors in reforestation. The protection of the young growth from fire I have not covered. Must be done by the fire associations. Now the increase of cut-over lands is eventually, probably, going to break the fire associations. In other words, we have a fire association that to-day has a large area of merchantable timber. The time is coming when the percentage of cut-over lands is so great that I will say, as a private owner, that I can not afford to stay in that association. I can protect for infinitely less what little timber I have left by putting a heavy patrol on all I own.

The CHAIRMAN. Well, are you not interested, then, in the growth—regrowing the trees?

Mr. TAYLOR. Yes; but I am bringing this down now to an economic proposition of what we are coming up against, and this reference that it has to land exchange, which was assigned to me in connection with this bill.

The CHAIRMAN. But as I understand, you want to take all the timber off of it and then turn it over to the Government; you want to take three times what you paid for the land off of it, and in addition to that pay for the soil.

Mr. TAYLOR. No; your understanding is vitally wrong, Mr. Chairman.

The CHAIRMAN. What?

Mr. TAYLOR. Your understanding is vitally wrong.

The CHAIRMAN. Well, in buying land do you take into consideration the value of the land and the stumpage, do you? Is that the basis for your estimate?

Mr. TAYLOR. Well, if I make a trade with the Government of cut-over land—

The CHAIRMAN. From the individual.

Mr. TAYLOR. Would you just as soon state your question again, Mr. Chairman?

The CHAIRMAN. I say in purchasing land you take into consideration the stumpage value?

Mr. TAYLOR. Yes.

The CHAIRMAN. The value of the land is not considered at all; isn't that it?

Mr. TAYLOR. That is pretty generally true.

The CHAIRMAN. Yes. Now, then, you take the timber off of it, and that is the only thing you paid for, and then you resell the land to the Government.

Mr. TAYLOR. I have that land in my ownership then, haven't I? What I paid for it does not enter into this question.

The CHAIRMAN. You said that you do not take the value of this land into consideration; all you paid for was the stumpage.

Mr. TAYLOR. I said that that in general was probably true. But what difference does that make?

The CHAIRMAN. Yes; it is probably true three or four times over.

Mr. TAYLOR. That may be also true. I did not take into consideration either, when I got an increased value in my land that is alongside of one of these highways that was built through the other day, that there was going to be a highway built through there, but that isn't any reason why I should not have the increased value on that, if it is the value when I sell it.

The CHAIRMAN. It has no value you say; it is not worth protecting.

Mr. TAYLOR. What is that, Mr. Chairman?

The CHAIRMAN. I say it has no value when you say it is not worth protecting.

Mr. TAYLOR. You put part of those words into my mouth. I did not say all of that. I did not finish my statement.

Mr. McLAUGHLIN of Michigan. He said the cost of protection under the plan of the association would be too high; it would be cheaper for him to do it himself.

The CHAIRMAN. I take it that that is the only plan that can be devised. The individual could not protect his forests. It would have to be in cooperation, wouldn't it, as far as fire protection goes?

Mr. TAYLOR. No; it would not have to be in cooperation. What I am leading up to, Mr. Chairman, is this, that as that cut-over area gets greater there is going to be a time when I will feel that probably a good deal of that land is not worth very much to me, and possibly I may let it go back for taxes. If the history of the Lake States and past history of other places follows, that will be true. Now, it may be that I will hold on to this longer hoping that something may happen. One of the things that can happen would be making it possible to exchange some of that land which is worth something to the national Government if it ties up with their other land that they have that they are going to protect timber on.

The CHAIRMAN. The question is, if it is of no value to you, of what value is it to the Federal Government?

Mr. TAYLOR. I did not say that it was of no value, Mr. Chairman. I can get some grazing out of it. I did not say that it was of no value.

The CHAIRMAN. You had reference to certain tracts of land that you did not believe had any value.

Mr. TAYLOR. I did not say that they were not of any value. I said that some of it might come to a point where I might think that I may let it go back to taxes.

The CHAIRMAN. It may come to a point where you think that.

Mr. TAYLOR. Yes. Now there is a certain amount of value for grazing on some of that land, but that may be great or small; it depends on the location, on the soil, etc.

The CHAIRMAN. Well, if the taxes exceed the grazing fees it would not have much value, would it?

Mr. TAYLOR. No. It would not have a great deal of value in that case, Mr. Chairman.

The CHAIRMAN. It would not have any?

Mr. TAYLOR. Yes.

The CHAIRMAN. And for that reason you would let it go for taxes?

Mr. TAYLOR. Well, I think we are more or less quibbling on this, because I think we understand each other perfectly.

The CHAIRMAN. Well, I think if I were in business, if I could sell a piece of land that I had to let go of for taxes, I would be glad to sell it for most anything I could get, wouldn't I?

Mr. TAYLOR. I didn't say what value I was going to put on that for the Federal Government, or what they were going to accept it for, did I? I have not said that. I am talking as a good citizen as well as one interested in the future of my business, and in regard to the future forest policy of the United States. Now, the United States does not have to take that land from me at any value I set on it unless the United States wants to do so. If this land ties right in to the national forests, and they can get a regrowth on that land, and they can protect it cheaper because it ties in with their own lands, that they already have, and they say to me, "What is that worth to you?" and I say what I think it is worth, we may have it appraised, whatever process is necessary, then on a given rate that they hold their timber for we can exchange.

That is only part of the land exchange proposition, however, Mr. Chairman.

The CHAIRMAN. If you get timber, why of course that has some value.

Mr. TAYLOR. That has some value, and I only get so much timber as they think my land is worth, and they are perfectly able to take care of themselves, so far as my experience has been with them.

Mr. McLAUGHLIN of Michigan. Well, that is what the bill says; value for value.

Mr. TAYLOR. Yes.

Mr. TEN EYCK. But according to the previous testimony these fellows that go through the woods and put an estimate on it have a wonderful way of increasing the estimate or decreasing the estimate as it is advantageous to them to do.

Mr. TAYLOR. Well, now, Mr. Ten Eyck, you are entering into a proposition that is—

Mr. TEN EYCK (interposing). It was so stated here by one of the Government experts.

Mr. TAYLOR. Are you familiar with timber cruising, Mr. Ten Eyck?

Mr. TEN EYCK. Well, I have seen a little of it.

Mr. TAYLOR. Well, now you are entering into two or three things there. One of them is a question of honesty, which I do not think we need to question.

The CHAIRMAN. That is a matter of judgment.

Mr. TAYLOR. That is a matter of judgment only, that I don't think we need to consider. Now, in that question of judgment, a certain tree I may look at and, even with experienced eye, say that that tree is good and sound, and I put a certain size on it. You come along and you see something on it that you think is defective; you may see something that you think is a defect, and you may think that rot will go up on the tree. Now, when we come out we may be 10 or 15 per cent off; we may not agree, but there may be a difference of 10 or 15 per cent between us, and we may be perfectly honest about it; and nobody can tell unless that tree is cut off.

Now, this whole question is a matter of progression, a matter of continued education. There is no question that can be answered yes and no. As Mr.

Long said the other day, you have got to have the interest of the public; you have got to have the interest of the private owner; you have got to have the interest of the Federal Government, if you are going to get this thing across, and it is an indisputable fact that the need is here.

The question is: What can we do; what process can we go through in order to get the result? Now, as to what Mr. Kincheloe says about what the private owner gets out of this: If the State and the Federal Government say that the private owner has done nothing which he should get any benefit from, and the private owner does not ask anything or any help, excepting in so far as it may be what pertains to posterity, and not to his immediate business, then he does not get anything.

I do not question for a minute but that there are lands which I look at to-day in our own operations as going back for taxes that in 10 years from now, due to forest protection and our education on this matter, I may look at differently. I may be able to do things 10 years from now that I can not do to-day. And yet I am willing to go the limit in cooperating on these things to see if we can not help.

As a lumberman, I take it that I am more interested than the average citizen is, because I am interested in the woods. I think most lumbermen are interested in the woods. And this proposition of a lumberman wanting to see devastated land—of course, that is by the point, but I don't think there is a lumberman in the world that does not hate to see a cut-over piece of land, as far as looking at it is concerned; I don't think there is a lumberman in the world that does not hate to see a cut-over piece of land worse than most other people.

Mr. TEN EYCK. Well, that is the same thing with all of us. We all hate to look at the pie plate that is empty.

Mr. TAYLOR. Yes; that is the same thing, certainly.

Mr. TEN EYCK. None of us like to do that.

Mr. TAYLOR. No.

Now, I want to make my statement as concise as possible.

The location of the national forest boundaries originally was based not so much on a careful classification of land as on matters of political expediency and compromise and matters of land ownership. Boundaries were often located to exclude large areas of potential forest land because the land was in private ownership, and parts of the public domain were left on the outside in deference to local sentiment. I think you all know what that means.

Inevitably, however, a large acreage of privately owned land was included inside the boundaries.

And now I am coming to one of the other phases of this land-exchange proposition.

The ownership of this land ranges from the individual claim owner, with a quarter section or less, to small blocks owned by the lumber companies and on upward in extent to the enormous checkerboarded grants to the railroad companies.

These lands under the present ownership are an effective bar to the most efficient management of the national forests, just as in many cases the creation of the national forests placed an effective barrier before the possible development of the privately owned lands. Each is in the other's way in every respect affecting the management of either.

The small-claim owner, surrounded by national forest land, has no opportunity whatever to either log his claim or sell it except as a part of the natural operating unit in which it may be situated, and in the determination of the selling policy of the Government as affecting this unit he can naturally have no voice.

What is true of the small owners is true in the same degree of the larger owners. The checkerboard situation has often prevented large drainages, some of them containing several hundred million feet of timber, from being properly administered and developed by either owner.

There is a big drainage, called Fishhook Creek, which Mr. Greeley, of the Forest Service, would be familiar with entirely, right next to the creek upon which we have our timber, which is owned by the Northern Pacific largely and the Forest Service, and they can not either one of them sell it and they can not either one of them do anything with it; and they have been trying to for the last 10 years. Now this land-exchange feature is a very important and a very serious thing. You can see, even in the protection of the young growth coming up, where, if checkerboarded all through your national forest holdings there are these other ownerships which have different interests, which in no way

have anything in common, that it is a difficult matter for the Forest Service to outline any plan whereby they can protect that whole area in the same effective way that they could if that was solidly blocked up. In almost every case, if not in every case, it would be equally beneficial to them and to the owners of those lands if they could exchange so that they could block up.

Mr. TEN EYCK. Well, then, in accordance with that the Government would help the private individuals whose land was adjacent to Government reservations to protect it much more cheaply than those cut-over tracts which are some distance away from any Government-owned property?

Mr. TAYLOR. That is true, Mr. Ten Eyck; but you must remember that out in that country the national forests are scattered around so much that you are not far away in most cases; in fact, in a great percentage of cases.

Mr. TEN EYCK. Well, take Wisconsin. I understand it has been said there are no national forests in Wisconsin.

Mr. TAYLOR. I am talking about the West, Mr. Ten Eyck. I am not referring to Wisconsin.

Mr. TEN EYCK. They said they had no national forests in Wisconsin.

Mr. TAYLOR. Yes.

Mr. TEN EYCK. Then it would cost us more to protect Wisconsin than it would Idaho?

Mr. TAYLOR. I do not remember that statement. I do not know just how it was made.

Mr. TEN EYCK. I asked the previous witness, I believe, whether or not he had any national forests in his State—Wisconsin. Am I correct in that, Mr. McLaughlin? Wasn't that the testimony, that there are no national forests in Wisconsin?

Mr. McLAUGHLIN of Michigan. I think he said there are none in Wisconsin.

Mr. TEN EYCK. Yes.

Mr. TAYLOR. Yes; didn't the question also come up there about buying areas which were checkerboarded around, so that it would be very expensive to protect them all? In other words, where they were not in solid blocks. I remember some conversation along that line.

Mr. TEN EYCK. Of course, I can appreciate that it would cost a great deal more if separated.

Mr. TAYLOR. Yes.

Mr. TEN EYCK. I appreciate that.

Mr. TAYLOR. If these cut-over lands that were traded with the Government have timber it would work in two ways. If I traded my cut-over land to the Forest Service and they tied in, I naturally would increase the life of the plant which I was operating, and in the long run the State and the county would benefit. Now, of course, there is a lot of this that comes back to the local taxing Government.

The CHAIRMAN. Tell how the exchanges are brought about? How has the exchange been passed upon? Are the lands appraised?

Mr. TAYLOR. They are appraised. I would rather that you would ask the Forest Service that, Mr. Chairman, because so far I have never made any exchanges with them.

The CHAIRMAN. You have not made any exchanges?

Mr. TAYLOR. No.

The CHAIRMAN. I understood you had.

Mr. TAYLOR. No. We are right close to them, Mr. Chairman, but we have never made any exchanges.

The CHAIRMAN. I beg your pardon. I do not want to take up your time. Kindly proceed.

Mr. TAYLOR. I think I have covered what I had a note of here that I was going to speak on.

It comes back again to that tax proposition and to the going back of lands for taxes. That will be done in a greater or less degree according as some of these things are done as will enable the owner to do something with it where he otherwise would not, and of course I am talking merely about that land which is fit for reforestation only and not for agricultural purposes.

I think, Mr. Chairman, that unless you want to ask me some questions, that covers most all of what I had in mind to say to the committee. I have some other notations here, but they are matters which have been more or less covered. The whole proposition, as I see it, is that the country needs more timber—is going to need more timber. There is going to be a shortage. The question is: What is the best way to avoid it? There isn't any question in my

mind but that the only way is by these three agencies getting together. I do not doubt at all, as I said, but that in 5 or 10 years, if this law were in effect and the State or the Federal Government came to me and said, "If you can do a certain amount of work on this land, and we have certain rights," or whatever the agreement might be, we feel that posterity would gain and the future timber supply would be increased, and we can pay so much toward that if you will stand the balance. As I said before, that is a matter of progress on—a matter of continued education. Each locality has its own special problem, and it is only through the cooperation of these three agencies that you are going to get a solution of those problems. It is for that reason that I think that I am decidedly and distinctly in favor of this bill.

That is all I have to say, Mr. Chairman.

The CHAIRMAN. Thank you very much.

(Mr. Taylor was excused as a witness.)

Mr. SNELL. Mr. Chairman, Mr. Bennett, former Member of the House, desired to make a very short statement and if you can hear him to-night we will be glad to have you do so.

The CHAIRMAN. We will be pleased to hear from you, Mr. Bennett.

Mr. BENNETT. I used to serve in the House myself, and I know what it means for you gentlemen to be sitting here so late. You have been here since 10 o'clock this morning. Suppose that I should submit a statement for the record?

The CHAIRMAN. Do as you prefer in the matter.

Mr. BENNETT. I will do that.

The CHAIRMAN. Without objection, it may be so ordered. If you will present your statement, it will be put in the record.

Mr. BENNETT. I will be glad to do that, Mr. Chairman.

(The statement is as follows:)

STATEMENT SUBMITTED BY MR. BENNETT.

The fact that I did not go ahead at the forestry hearings on January 11 is no indication that I am not interested. I simply knew from my own congressional experience that it was unfair to prolong committee hearings beyond 5 p. m. when they commenced at 10 a. m. that day.

Personally, I regard the forestry question as one of great importance. Mr. Pinchot gave the committee a good idea of the uses of wood, and he might have added that every factory in which there is rapidly moving machinery needs wooden beams to take up the vibration and that no acceptable substitute for bridge timber has yet been found. Steel and stone railroad bridges there are, but the rails on them are laid on wooden ties.

Realizing the importance of the subject, I wish at the outset to acknowledge the debt we owe to Snell. The hearing on the Snell bill was the first time anyone ever saw the Chief Forester, his two predecessors and representatives of the lumber and pulp industries all frankly acknowledging the importance of the problem and the necessity of cooperation. Up until now the lumbermen and the forester have been pulling apart; now they are, substantially pulling together.

It does not disturb me in the least that they differ very widely in their views. That is only natural, as forestry is a comparatively new subject in this country, and even abroad there is no unity of method. The main thing is that in connection with the forest problem all stand together on the principle of the Snell bill—the necessity of cooperation between the Nation, the States, and individuals. Differences as to detail are matters to be settled by the painstaking industry of your committee and others.

My knowledge of the subject is something I had to acquire, because I am chief legal adviser of the Park Falls Lumber Co., which operates a substantial tract of hardwood in northern Wisconsin; of the Edward Hines Yellow Pine Trustees, operating a tract of long-leaf yellow pine in southern Mississippi; and of Mr. Edward Hines personally. Mr. Hines, among other activities, is president of the Virginia & Rainy Lake Co., which operates a large tract of white pine in northern Minnesota.

I came to my present work with a great desire to assist in preserving the forests. I have always been, and still am, a friend of Gifford Pinchot and of Col. Graves. I always supported in Congress what they and Col. Roosevelt wanted about the national forests. I helped put through the Weeks Act.

On the whole, what they have, from time to time, succeeded in persuading Congress to do, still seems to me, in the long run, to have been in the country's best interest.

I tackled, then, reforestation of cut-over lands, with a sympathetic interest. The first thing that I found to be true is that the forest problem is an entirely different one in each part of the country. In the West, for instance, and in New York State, fire is a menace to standing timber, and so it is to our Minnesota pine and to our Wisconsin hemlock, though our hardwood is immune to a certain extent, although standing hardwood in Wisconsin has burned, while in Mississippi our lands are burned over annually. Our turpented lands we burn ourselves, each October. First, we clean around each tree to a distance of 3 feet, hoeing down to the moist earth, then we send the fire through. There is no underbrush in a southern pine forest, the grass throws out very little heat, and the 3-foot space around each tree protects it. We burn it over so that the turpentine trees will not catch from general forest fires. The remainder of our forests in the South is burned over each spring by farmers and cattlemen who graze their cattle on our unfenced acres and who burn off the last year's grass so as to bring on the more quickly the new, green grass for their cattle. Their fires injure the timber some, but do not destroy it, and the custom is so general that we can not stop it.

As to reforesting, I found that lot owners in Maine, New Hampshire, and northeastern New York have, on woodlots and small holdings, practiced it for many years. A man will buy 60 acres of land, farm 40, and let 20 grow up. He makes a living on the 40 acres, and, after about 30 years, a substantial sum off the timber on the 20 acres. As one witness testified, it makes small lumber, 3-inch strips for boxes and crating lumber generally, pieces of wood for the smaller wood-working industries, poles, cordwood, and the like. The method is possible only because of the thrift, foresight, and patience for which the people of New England have been noted, their closeness to the market, the fact that it is an old settled country, and that everything is fenced and protected. But it does not produce big timbers at all.

Many people in New York have gone into reforestation zealously, but so far as I can find, largely for railroad ties and pulp wood. That State utilizes convicts at the Great Meadows Prison to grow young trees on large tracts of land, and anyone can buy, for transplanting, the trees in various stages of growth.

All of these Eastern States I studied for light, first, on our Minnesota problem. The immediate results were interesting, but not especially helpful, but they did have the result of putting me in touch with some good men, both still in the Forest Service, and who have left it. By them I was placed in touch with the mills in Cloquett, Minn., who were working along the same line. They have found that if the Minnesota Legislature will pass the proper tax law, reforesting for pulp wood in large tracts of land northeast of a line extending roughly from Duluth to International Falls can be conducted with a possibility of profit and on land better suited for trees than for agriculture.

The Virginia & Rainy Lake Co. has authorized its counsel to cooperate with the Cloquett companies, so next year when the legislature meets we will start in to get the tax exemption laws which we need in order to reforest.

In Wisconsin I ran across another situation. Hardwood land, at least in Wisconsin, is naturally good agricultural land. Northern Wisconsin is a great dairy country. As fast as we cut over our lands we sell them to actual settlers in 40 and 80 acre tracts. We are well organized for this, and in the past five years have put between three and four hundred families on the land. Under such a situation it would be waste to reforest, as land which is valuable for agriculture should be used for that purpose and not reforested. There are lands in Wisconsin fit for nothing but reforesting, and these the State ought probably to reforest. Private owners, on account of the taxes and the long time involved, can not.

I gave up trying in Mississippi very quickly. They have a tax law in Mississippi which not only prevents reforesting but compels destruction. As an example, some time ago we cut over about 400 acres of land in one county. We left some hardwood, some small trees and some big red heart trees, none commercially valuable, but good for a farmer to have when he started to cultivate and needed fences, firewood, etc. The county sent a man out who estimated that there was about 400,000 feet of standing timber on the 400 acres. He admitted that it had no commercial value, but the board assessed it at \$5 a thousand. This would have meant about \$100 a year taxes, not only for this year but each succeeding year, so we sent some men up and cut down everything over 2 inches thick and let it lie where it fell. Under such a tax law, so administered, reforesting is impossible. In addition a private individual can not keep his neighbors from burn-

ing over his land every spring, and a private individual can not fence against hogs.

The fires kill the young pine shoots, and the hogs root them up for food, as they are sweet and succulent. W. R. Pickering & Co., of Kansas City, Mo., are the most recent people who have tried to fence against hogs. They could not, of course, guard the fence, which was cut in a score of places in the first week. Recently they abandoned the effort and charged \$15,000 to profit and loss and experience.

From my study of the subject I have been reluctantly driven to the conclusion that—in the East, anyway—no timber for sawmill purposes can be reproduced through private sources. Pulpwood, railroad ties, crating lumber, poles, cordwood, and the like may be here and there, but not timbers or 10-inch boards. The difficulties are too many, the time of reproduction is at least 40 years, and no man will invest his money and wait 40 years for a return. But preparations must be commenced now for the timber supply, of, say, 75 years hence. Fortunately, along the Atlantic coast, from Virginia to Texas, there is a strip of land relatively narrow and not continuous, on which long-leaf and short-leaf yellow pine can be grown, the short-leaf in about 35 years, the long-leaf from about 75 to 100 years. This land is of little value for anything else. Let the Government, under the welfare clause in the Constitution, purchase and plant this land for the benefit of all the people. The start should be made in Virginia and the Carolinas, where the growth for short-leaf is known to be quick.

On the west coast well-informed men say that the fir and spruce lands reforest themselves if fire is kept out of cut-over lands, and that good and comparatively large timber can be reproduced in 75 years. If this is so, we have a strip on the Atlantic and Gulf coasts and another on the west coast which, together, can produce enough timber for our needs. In addition, the question being a strictly economic one as the present supply of standing timber lessens, stumpage will increase in value, and when it becomes valuable enough to warrant it and when people have become accustomed, as they are in France, Germany, and England, to pay a substantial price for lumber and to utilize more of the log than they now do, selective cutting will be commenced by owners for the simple reason that they can afford it. In France they have selective cutting, but a timberman gets about \$50 a thousand stumpage for his trees. In this country he is lucky if he gets from \$5 to \$7. When our stumpage has risen sufficiently in value, when we have tax laws which help instead of hinder, we will have selective cutting, too, and then, and not till then, will private owners grow trees as a crop because returns can be had annually, and not once every 40 years.

I do wish that your committee in some way could take up the question of waste. In Sweden logs 2 inches in diameter are brought to the sawmill, in Wisconsin and Minnesota, 4 inches; in Mississippi in 1919 and 1920, 4 inches, including pine and hardwood; now 8 inches, and pine only; and on the west coast, both from private and national forests, 10 inches. Smaller timber is left in the woods. It is left because at present prices of lumber it does not pay to bring it out. In Mississippi in 1920, when prices were good, we brought trees out of the woods which made only the lower grades of lumber—No. 3 and No. 4. Now we leave all logs producing more than 80 per cent of No. 3 in the woods, and such No. 4 as is incidentally produced we burn. We have to, because the demand is so small and the price so low that we can not afford to handle it. Adding together the tops, small logs, and trees producing No. 3 and 4 boards, which we brought out in 1920 but leave now in the woods, we find that about 20 per cent of what we utilized in 1920 we are not utilizing now. It is not a great direct commercial loss to us, as there was never much money in this small and low-grade lumber, but at 1920 prices we got enough out of it to pay for the stumpage and handling and the country got the benefit of 20 per cent of the forests which it is not now getting.

What we are principally losing is the lessening of the time of use of our two sawmills which have cost a great deal of money and which, naturally, we want to use as long as we profitably can. Another economic loss to the country in this time of low prices comes from the lessened demands for "short lengths." A carpenter now who really wants four pieces 4 feet long orders one piece 16 feet long. He could buy the four short lengths for less, and does when the prices are up. But now he doesn't take the trouble and passes on the higher cost to the consumer. The result of this is that many millions of feet of perfectly good material are turned into firewood at the mill because no profitable market can be found for it as lumber.

There ought to be a universal campaign against such waste. No architect or builder ought to recommend anything better than No. 3 common for sheathing under siding and no person should use better than No. 3 or 4 for dunnage or crating lumber. If you give the Forestry Bureau a proper appropriation for a campaign against waste, and instructions to make the campaign, you stand a good chance to save the country 20 per cent of the present standing timber in the entire South, and at very slight cost. It simply needs a campaign of education, and the time for it is ripe.

To show you what this means, in our one operation, at the present rate of cutting, the saving of wood that we can not utilize but which could be utilized if "short lengths" and low grade boards were used where they should would amount to 12,000,000 feet annually. Multiply this by the number of sawmill units in the South and you will get some idea of what the Forestry Bureau can accomplish by a properly directed and financed campaign against waste. The No. 3 boards we produced incidentally in 1921 cost us an average loss of a thousand feet and No. 4 incidentally and accidentally produced, \$16 a thousand. That we held over from 1920 caused us a loss of \$26 a thousand.

Of course, the various lumber associations should make this campaign also as a matter of fact they are, but, naturally, they are handicapped because of their pecuniary interest, from which interest a campaign by the Forestry Service would be free.

If this letter were not already far too long I should add in relation to the Mississippi tax law what we did on the 400 acres mentioned above is necessary to our general policy. Everything we can not utilize, but which is over 2 inches thick, we cut down and leave lying in the woods.

Mr. SNELL. Now, as I understand the arrangement, you have invited so many special people to come and appear before you to-morrow, Mr. Pinchot, Mr. Graves, and also Mr. Rhodes, I believe, and that will take up the day to-morrow and then we will conclude our hearing before you as early as possible Friday morning, trying to get through by Friday noon if we can.

We will be obliged to ask to incorporate in the minutes three or four brief statements by members that came here who were obliged to go away before we could call on them.

The CHAIRMAN. Without objection, it will be so ordered.

Mr. SNELL. We will present them later.

The CHAIRMAN. Is that all to-day?

Mr. SNELL. Yes; that is all we will present to-day, Mr. Chairman. The hearing is late.

Mr. KELLOGG. Unless you wanted to hear Mr. Sherman on classification. There were some questions asked of Mr. Sherman, and if you want to hear him now he can come back.

Mr. SNELL. The man who asked the question has gone, Mr. Kellogg.

The CHAIRMAN. Yes.

Mr. KELLOGG. Mr. Sherman was asked to give some points on classification of public domain.

The CHAIRMAN. I take it that can be done to-morrow, can it not?

Mr. KELLOGG. Yes; I think so. He will be here in Washington and can call on later.

The CHAIRMAN. Mr. Kincheloe asked him some questions.

Mr. SNELL. That is all to-night, Mr. Chairman. I thank you very much for your courtesy.

The CHAIRMAN. Without objection the committee stands in recess until 10 o'clock to-morrow morning, at the committee room on the fourth floor.

(Thereupon, at 5.05 o'clock p. m., Wednesday, January 11, 1922, an adjournment was taken until 10 o'clock A. M., Thursday, January 12, 1922.)

STATEMENT OF HUNTINGTON TAYLOR, GENERAL MANAGER, EDWARD RUTLEDGE TIMBER CO., AND SECRETARY TREASURER, COEUR D'ALENE TIMBER PROTECTIVE ASSOCIATION, COEUR D'ALENE, IDAHO—"THE IMPORTANCE OF LAND EXCHANGE LEGISLATION TO THE FUTURE FOREST POLICY OF THE UNITED STATES."

My statements to you will be confined to the "Importance of land exchange legislation to the future forest policy of the United States." I am general manager of the Edward Rutledge Timber Co., of Coeur d'Alene, Idaho, and secretary-treasurer of the Coeur d'Alene Timber Protective Association, a 1

fighting organization composed of timber owners and which includes the State of Idaho as a regular member.

Appearing before you as a lumberman, the question will naturally be asked what interest I or other lumbermen have in the future forest policy of the United States and in the Snell bill.

For over 20 years the subject of a national forest policy has in greater or less degree agitated the public mind. Foresters and forest economists have tried persistently to hammer home this great basic truth—that if the United States, as a Nation, is to continue to saw lumber, it must, as a Nation, provide trees to saw it from.

Yet this same period of agitation has marked the finish of the lumber industry in States which once led the Nation in the annual cut of lumber and has marked the serious decline of the industry in many others. And this period, too, has witnessed the growth to high ranks of the lumber industry in the Western States.

Having observed these marked changes in conditions, the progressive lumberman, both as a good citizen and in the future interest of his own business, has been and is quite ready to lend his support to forestry measures which are economically sound.

During this epoch-making period what constructive accomplishments mark the progress of the forestry idea? Two things that over-shadow all others: One, the establishment of the vast system of national forest under the direction and supervision of the Forest Service; and the other, the birth, growth, and finally the enormous expansion of cooperative forest protection by private owners started by a few Coeur d'Alene timbermen in 1906. (Constitution cda for Prot. Assoc.) Coeur d'Alene Timber Protective Association protects lands—public domain for which the Government pays nothing.

In the creation of the national forests a vast national storehouse full of timber had been set aside for the Nation's coming needs. With the enormous task of organizing the national forests for administration before the country there was little time and little inclination to consider, at that period, the extension of forestry to any other than Government-owned lands. And yet the private owners had seen the light in the forest-protection idea and had started on their own initiative a comprehensive timber-protection policy.

A number of history-making years in forestry passed by—years in which the facts hammered home in the early agitation had proved themselves and the alleged facts of the same period had also proved themselves to be wild guesses; yet at the same time years in which, to a marked degree, foresters had shown themselves competent to run the business of forestry.

But during these same years foresters and forest economists had been slowly taking stock in the Nation's timber storehouse and had been carefully measuring the consumption of forest products throughout the land, keeping an anxious eye, too, on the annual fire loss.

Finally the time came when forest economists thought it necessary to hammer home the same basic truth about the relation of the production of lumber to the supply of trees to cut it from.

It was shown quickly and convincingly at the outset that the vast national storehouse of timber in the national forests was not so vast after all, for after stock had been taken it was necessary to discount liberally enormous areas of water surface, mountain tops, brush, and noncommercial timber which were included in the forests and which, while having a rather indefinite but none the less positive value for recreation, will never produce any lumber for the Nation's need. Speaking in terms of potential forest land—land adapted to and best suited, economically, to the continuous production of forest crops—the supply wasn't going to go around. There wasn't land enough in the national forests to grow timber in sufficient volume to meet the Nation's annual needs.

If this was true and if the Nation's needs were to be met, it was obvious that it was going to be necessary to introduce the practice of forestry on lands not at the time in Government ownership.

In the minds of nearly everyone in touch with the subject this meant that to change the method of handling the forest growth on anything like all this land it was going to be necessary to change the ownership of much of the land itself. Under present tax, economic, and financial conditions it is entirely infeasible for many States for private capital to interest itself adequately in the uncertain returns available from the practice of forestry. It follows, then, that since forestry is only to a limited degree within reach of the private owner, the States or the Nation, or both, must undertake it on a scale more commensurate with the

country's requirements. Since the national forests provide a splendid nucleus around which to build, Government ownership of potential forest land has commended itself to many as the easiest solution of the problem.

Thus the problem itself has become fairly well defined. It involves the transfer to Government ownership of a sufficient quantity of potential forest land to provide enough area in the aggregate, with what the Government already has and the limited area that other owners can afford to keep under proper permanent management, to yield an annual crop at least equal to the Nation's annual consumption of forest products.

Various important factors have a bearing on the problem. One involves the protection of areas of young growth from fire. Enormous areas of reproduction in private ownership have been saved from fire by the cooperative forest protection work of private owners. How much longer will it be possible for the private owners to hold on to these lands? The cost of taxes and protection is out of all reasonable proportion to any value which can be put on these lands under the conditions of past years. They are decidedly expensive lands to own. Yet the lack of a market for them has naturally resulted in no value having been placed on them and carrying charges have mounted steadily higher until they are working toward the breaking point. Forest protection by private owners is, and must be, under present conditions, based on the idea of protecting a present asset—merchantable timber. It is fortunate that in some States, notably Idaho, it has been possible incidentally to protect reproduction also. At the present time the larger acreage in the Western States is in merchantable timber but this condition is changing and inevitably the time will come when the larger acreage will be in cut-over lands. Right then private forest protection will begin to be in danger of falling of its own weight unless some constructive policy is evolved which will fix both the value and a market for this class of land.

The reversion for taxes of thousands of acres of desolate barren wastes in the Lake States and in other once forested communities is ample, and should be convincing proof of this.

The time to protect forest growth is undoubtedly when the forest growth is on the land but there must be, for the private owner, some incentive to have it and keep it there.

Another factor involves a phase of the problem which is so important as to be often mistaken for the problem itself—the perplexing question of private ownership of potential forest land within the national forest boundaries, and immediately adjacent to them on the outside. The location of the national forest boundaries originally was based not so much on a careful classification of land as on matters of political expediency and compromise and matters of land ownership. Boundaries were often located to exclude large areas of potential forest land because the land was in private ownership and parts of the public domain were left on the outside in deference to local sentiment. Inevitably, however, a large acreage of privately owned land was included inside the boundaries.

The ownership of this land ranges from the individual claim owner with a quarter section or less to small blocks owned by the lumber companies and on upward in extent to the enormous checkerboarded grants to the railroad companies.

These lands under the present ownership are an effective bar to the most efficient management of the national forests just as in many cases the creation of the national forests placed an effective barrier before the possible development of the privately owned lands. Each is in the other's way in every respect affecting the management of either.

The small-claim owner, surrounded by national forest land, has no opportunity whatever to either log his claim or sell it except as a part of the natural operating unit in which it may be situated, and in the determination of the selling policy of the Government as affecting this unit he can naturally have no voice.

What is true of the small owners is true in the same degree of the larger owners. The checkerboard situation has often prevented large drainages, some of them containing several hundred million feet of timber, from being properly administered and developed by either owner.

Still another aspect of the problem is the effect, if any, which the proposed exchanges would have on local tax receipts. Unquestionably the States and counties stand to win in the long run through the placing of additional areas of forest land under management. The share in the gross receipts from the

national forests which is distributed to the counties on an acreage basis is 35 per cent of the gross receipts of the national forests in those counties. This in time would produce a considerable income from lands which otherwise would have reverted for taxes and would therefore produce no income.

As cutting progresses and the present areas of private timber are changed into areas of cut-over land, this condition would undoubtedly in time be universal if the history of the older forested regions is to be repeated in the new.

And so, with the problems and all its various corollaries before the Nation, some program must be worked out in solution. Much has already been done in outlining a policy which has received the cordial support of the lumbermen, pulp and paper people, the wood-using industries, foresters, and through the forestry associations the general public. The point of attack centers in the bill introduced by Representative Snell, of New York, which we are considering here. This bill provides for two things which I have tried to stress in my remarks to-day. One is the proposal for a very greatly increased participation by the Federal Government in private-forest protection, and the other is a provision for the authorization of a general land-exchange policy.

Increased Federal participation in private protection work is to be predicated largely on the extension of this work to include areas of immature timber; and while it will be appreciated and welcomed by the private owner, had the bill not also included the land-exchange section he might well have wondered why the private owner should protect young growth at all if he could never realize on his investment in it.

The land-exchange section of the bill is as follows:

"That the Secretary of the Interior be, and hereby is, authorized to accept on behalf of the United States title to any lands within or adjacent to exterior boundaries of national forests, if in the opinion of the Secretary of Agriculture the public interests will be benefited thereby and the lands are chiefly valuable for national forest purposes, and in exchange therefor may give not to exceed an equal value of such national forest land or timber or assignable certificates for timber within the national forests as may be determined by the Secretary of Agriculture and accepted by the owner as fair compensation, consideration being given to any reservations which either the grantor or the Government may make of timber, minerals, or easements. Such assignable certificates for timber shall be issued under the authority of the Secretary of Agriculture, shall be for the agreed values of the lands acquired, and shall be accepted at their face value when accompanying bids for the purchase of national forest timber or in payment for national forest timber purchased under existing laws and regulations. Any timber given under such exchanges shall be cut and removed under the direction and supervision and in accordance with the requirements of the Secretary of Agriculture. Lands conveyed to the United States under this section shall, upon acceptance of title, become parts of such national forests as the Secretary of Agriculture shall designate: *Provided*, That the Secretary of the Interior shall report to Congress annually the quantities of such land exchanges as are consummated and the names of the parties thereto."

The wording is broad and sufficient and avoids the restricting limitations which were the faults of the bills passed some years ago. One of these, the forest reserve lieu selection act, provided for exchanges on the basis of equal area. Obviously, it was nearly impossible to work out a fair trade on that basis. Another law required both equal value and equal area. Trades on this double basis were as a general rule physically impossible.

The bill would supplant some thirty other local bills now pending in Congress which affect an individual national forest or two. It is broad in the sense of territorial application.

The authorization is provided in sufficiently broad wording to take care of all the embarrassing situations we now have. The small claim owner who can not now dispose of his claim could exchange it all—land and timber—for an equal value of assignable certificates or for an equal value of timber which he could log himself. Large drainages now checkerboarded could be blocked out for operation by the private owners or for more efficient administration by the Forest Service. Relief for both the Government and the private owner could be had for a distressing situation which obtains throughout the national forest region.

But, far more important than the vexing local problems of operation and administration, the bill, through its land exchange section, will show daylight ahead to the private owner in the protection of his cut-over lands at the same

time that it provides on an adequate scale for the growing of the Nation's timber of the future. This will be the saving factor in the whole present situation of the national forestry idea. While ways and means, policies and practices, responsibilities and liabilities are being worked out, it will be possible to go ahead and keep trees growing on the areas which are to hold the Nation's timber supply of the future.

And I wish to strongly emphasize in closing that the idea that the lumbermen deliberately put a premium on so-called "devastation" of their timberlands to the utter disregard of the welfare of their own business is absurd and untenable. I repeat that the lumberman has been and is quite ready to lend his support to forestry measures which are economically sound.

Now is the time for the inauguration of a policy under which the young timber now growing can be kept green by providing its owners with an incentive to protect it. This is much more important than any question of responsibility or of methods at this time. As has been most aptly said, "The time has now come, not to quibble but to grow trees."

STATEMENT SUBMITTED BY CHARLES LATHROP PACK, PRESIDENT OF THE AMERICAN FORESTRY ASSOCIATION.

The foresters and lumbermen have told you why they believe a forest policy is necessary. Now, I wish to explain to you that the public demands constructive action by Congress in the adoption of a forest policy. Speaking for the American Forestry Association, an organization composed of many thousands of citizens, and with its membership in every State in the Union, I desire to say that it has indorsed the Snell-McCormick bill. I can tell you frankly that there is perhaps not a Member of Congress whose constituents are not hoping that Congress will take some helpful action toward increasing our lumber supply, protecting from fire our existing forests, reforesting our cut-over and "thrown-away" lands, and growing new forests where they should be grown. A progressive people know that our idle lands are as unprofitable as idle citizens.

I wish to impress upon you the fact that practically every newspaper in the United States is in favor of this movement to secure the growing of lumber as a crop and for the perpetuation of our forests. They are printing news articles telling of the necessity for more forest-fire protection, forest regrowth, forest planting, and the value of forests to our people. They are printing editorials vigorously indorsing proposed legislation. They are asking for action on a forest policy. I shall not take your time by telling you what they say, but will submit to you extracts from editorials taken from papers in all sections of the United States. These will tell you better than I can what the sentiment of the newspapers is on this vitally important question.

I will quote a few:

"There is not an American industry that can survive without wood, or some substitute for wood; and no substitute has been discovered. There is no country that can survive without forests, except as deforested China has survived, a constant prey to flood and famine."—Macon (Ga.) Telegraph.

"The matter of the preservation and reclamation of our forests is one of the most important problems of the country, and yet comparatively few people realize it."—Charleston (S. C.) American.

"To protect and scientifically develop forests and plant lands most suitable for tree growing is an American public duty so evident that it should be unnecessary for conservationists to make the tremendous efforts which they unhappily have to make to arouse action."—New York Evening Mail.

"Idle land must be put to work growing timber, for a crisis nears; and when that crisis comes it will be the public, as usual, that pays the bill."—Sault Ste. Marie (Mich.) News.

"The period of waste of our forest resources must now come to an end."—San Francisco (Calif.) Chronicle.

"Whether you buy, own, rent, or build, the cost of the house you live in is materially affected by every forest fire, which further depletes this Nation's supply of timber."—Collier's Weekly.

"The investment in a common-sense system of forestry is a sound one; it is more than that, since it is the only way to prevent absolute destruction of forest resources."—Asheville (N. C.) Citizen.

"Forestry devastation has become an equally National and State issue."—Albany (N. Y.) Knickerbocker Press.

"The cause of forestry is of national import and of utmost economic and human significance."—Augusta (Ga.) Herald.

"A crop shortage is serious, but concern should probably be greater for the loss of forests."—Buffalo (N. Y.) Courier.

"In considering a national forest policy we must consider a disease. That disease is forest devastation, the American Forestry Association points out. Its effect is a slow sapping of national strength through the steady exhaustion of the national timber supply."—Milwaukee (Wis.) Journal.

"We haven't taken any care of the forests; haven't even thought about reforestation, yet this means millions of dollars to the South every year."—Thomasville (Ga.) Advertiser.

"There is no other element of national wealth that is more important than timber."—Louisville (Ky.) Courier-Journal.

"Unless most of the country dwellers and a large part of those who are housed in cities become aroused to the necessity of replacing the forests, there is serious trouble ahead for both city and country."—Rochester (N. Y.) Democrat-Chronicle.

"A good, healthy forest policy looks to us like the best kind of insurance."—Sacramento (Calif.) Union.

"Reforestation is insurance against a form of bankruptcy in national timber resources that is undoubtedly in prospect if the country does not mend its ways."—Providence (R. I.) Bulletin.

"The importance of forested areas to our national life is still imperfectly realized."—Philadelphia (Pa.) Inquirer.

"Does not even a moment's thought serve to convince you that the reforestation projects demand your most urgent attention."—People's Home Journal.

"That our forests are disappearing rapidly is a well-known fact and very little is being done in the matter of reforestation. If future generations are to have timber necessary to their needs, something will have to be done."—Columbus (Ga.) Enterprise.

"The wastefulness of the American people in respect to their forests would be criminal if it were not so thoughtless."—Baltimore (Md.) Evening Sun.

"We have wasted our forest substance like the proverbially drunken sailor does his pay."—Washington (D. C.) Herald.

"We must have a forest policy that will put the idle acres in the Middle West and in the East to growing trees."—Burlington (N. J.) Enterprise.

"Conservation of the remaining forests of the United States and reforestation are two questions worthy of much more consideration."—Salt Lake (Utah) Tribune.

"When the United States becomes treeless, as it surely will if vigorous and speedy action is not taken, the plight of the industries depending upon timber will be a small part of the catastrophe. When the trees disappear the land will become a desert."—Rochester (N. Y.) Democrat-Chronicle.

"Reforestation is a task that ought to be undertaken and continued year after year throughout those regions of our country where so long the cutting of forests has been going on without adequate work of restoration."—Albany (N. Y.) Journal.

"Three-fifths of the virgin forests of the United States have already disappeared, and the present drain on our remaining forests is nearly four times their yearly production of wood. Clearly such conditions can not continue. We owe it to posterity to keep the United States from becoming a treeless nation."—Cleveland (Ohio) Plain Dealer.

Let me call your attention also to the demand for this legislation by citizens' organizations. Chambers of commerce and boards of trade have passed resolutions approving it. The Chamber of Commerce of the United States sent a committee on a 10,000-mile tour to examine forestry and lumbering conditions in New England, the Lake States region, the Pacific coast, and the South, and I expect its report, soon to be made, will be of great value to your committee.

Civic organizations of various kinds have gone on record as expressing the views of the people regarding a national forest policy and their desire for legislation providing one.

In a word, gentlemen, there is a practically unanimous desire on the part of the public that Congress will take favorable action on a forest-policy bill and do so at this session.

COMMITTEE ON AGRICULTURE,
HOUSE OF REPRESENTATIVES,
Thursday, January 12, 1922.

The committee met at 10 o'clock a. m., Hon. Gilbert N. Haugen (chairman) presiding.

Present: Messrs. Haugen (chairman), McLaughlin of Michigan, Purnell, McLaughlin of Nebraska, Tincher, Williams, Sinclair, Gerner, Clague, Clarke, Jacoway, Aswell, Kincheloe, Jones, and Ten Eyck.

STATEMENT OF MR. GIFFORD PINCHOT.

Mr. PINCHOT. Mr. Chairman, I have a duty to perform first, with your permission, which was laid upon me by the forest commission of Pennsylvania at a recent meeting. I was instructed to present these resolutions from the forest commission of Pennsylvania, which is the governing body of the Department of Forestry:

"Whereas Pennsylvania is able to furnish only one-fifth of the timber supplies without which her agriculture and her industries can not go on; and

"Whereas Pennsylvania, like all the other timber-importing States, depends, and must for years depend, upon supplies of wood from regions beyond her own boundaries; and

"Whereas, until Pennsylvania can be made self-supporting in forest products, her agriculture and her industries must be and continue absolutely dependent for indispensable supplies of wood upon the few remaining timber-exporting States of the Union, there being no adequate and available forests upon which she can draw outside the boundaries of the United States; and

"Whereas the Snell bill, hearings upon which are now in progress in Washington, provides in sections 1 and 2 for giving to the few remaining timber-exporting States a veto power over the prosperity and welfare of the far more populous, numerous, and powerful timber-importing States of the Mississippi Valley and the East, Pennsylvania being one of them, by leaving the decision as to whether the forests upon which all the States must depend shall or shall not be destroyed, to the legislatures of the timber-exporting States, over which neither our State government nor our Representatives in Congress have any power of direction or control: Therefore be it

"*Resolved*, That the Pennsylvania Forest Commission hereby records its emphatic opposition to those portions of the Snell bill which would deprive Pennsylvania, through her Representatives in Congress, of any voice as to the future security of the timber supply, without which her people can not prosper; and be it further

"*Resolved*, That the commissioner of forestry is hereby directed to forward copies of these resolutions to the governor and the Representatives of Pennsylvania in Congress, and to place them in person before the House Committee on Agriculture, now engaged in considering the Snell bill."

Mr. CLARKE. That is a State organization?

Mr. PINCHOT. That is a State organization which has control of the forest work of the State of Pennsylvania.

Mr. McLAUGHLIN of Michigan. That is an official body?

Mr. PINCHOT. That is an official body consisting of five men appointed by the governor.

Mr. ASWELL. And are you appointed by them?

Mr. PINCHOT. No, sir; I am appointed directly by the governor.

Mr. McLAUGHLIN of Michigan. You say "until Pennsylvania shall become self-supporting." I suppose you are doing something toward that end. What progress are you making?

Mr. PINCHOT. We are in a very serious situation in Pennsylvania, Mr. McLaughlin. We are importing four-fifths of the timber that we have to have to do business. Just as an illustration of how serious the situation is, the anthracite mines alone in Pennsylvania put into the ground each year twice as much timber as the entire State of Pennsylvania produces.

Mr. ASWELL. Do you not need some aid from the Government to help you along those lines?

Mr. PINCHOT. We need certain kinds of aid, which I mean to ask for a little bit later.

Mr. McLAUGHLIN of Michigan. That is the present situation, which I think we understand pretty well, but you stated "until Pennsylvania becomes self-supporting," involving the idea that one of these days—soon, perhaps—the State will be self-supporting. What are you doing and what is the prospect?

Mr. PINCHOT. Not soon, but eventually we hope it will be. Pennsylvania used to be the first timber-producing State of the Union. Destructive lumbering followed by fires reduced it to its present condition, and about one-sixth of the State by this lumbering and through these fires has been put out of production.

Mr. CLARKE. What are you doing now?

Mr. PINCHOT. I will come to that in a moment. Fire in Pennsylvania is the essential element that is keeping us back, and what we are trying to do is, first, to stop the fires, and, second, to replace, so far as that is possible. At the last session of the legislature Pennsylvania appropriated \$1,000,000 for fire protection for the two-year period.

Mr. CLARKE. What had the State done before that?

Mr. PINCHOT. Before that it was appropriating smaller amounts for some years back.

Mr. CLARKE. Have you any record of what those amounts were?

Mr. PINCHOT. Yes.

Mr. CLARKE. Would you give them to us so that we can put that in the record?

Mr. PINCHOT. I can send those amounts to you. I have not them in my head. The Pennsylvania Department of Forestry has been established about 15 years, and I will give you the whole story with pleasure.

The fires have been steadily encroaching on the area of productive timber in the State. Whether we have succeeded in the last year or two in reversing that movement, I do not yet know. We are in process of making measurements which will tell, but we have succeeded in controlling the fires to a degree that had not been reached before.

Mr. McLAUGHLIN of Michigan. What are the private owners doing in the matter of cutting. Are they pursuing their old destructive methods?

Mr. PINCHOT. Yes.

Mr. McLAUGHLIN of Michigan. Leaving everything on the ground?

Mr. PINCHOT. Yes.

Mr. McLAUGHLIN of Michigan. Or have you laws that are being enforced to ameliorate that condition?

Mr. PINCHOT. The lumbering is getting steadily more and more destructive as the smaller timber becomes more marketable.

Mr. McLAUGHLIN of Michigan. Your legislature has authority to control or to influence that situation; has anything been done?

Mr. PINCHOT. Nothing whatever, and in my judgment nothing can be done.

Mr. McLAUGHLIN of Michigan. Why not?

Mr. PINCHOT. For political reasons.

Mr. CLARKE. Political reasons?

Mr. ASWELL. What has politics to do with lumber?

Mr. PINCHOT. It has an immense deal to do with lumber in certain places.

Mr. McLAUGHLIN of Michigan. To what extent has the State been acquiring some of that cut-over land, perhaps some timbered land?

Mr. PINCHOT. The State has 1,126,000 acres.

Mr. McLAUGHLIN of Michigan. Largely what kind of stuff?

Mr. PINCHOT. Almost entirely hardwoods.

Mr. McLAUGHLIN of Michigan. Standing?

Mr. PINCHOT. Standing hardwoods, but very largely brush land or young stuff smaller than the height of this room.

Mr. McLAUGHLIN of Michigan. Largely land that had been cut over.

Mr. PINCHOT. All of it with the exception of a few accidental patches here and there that were so far back they could not be reached.

Mr. McLAUGHLIN of Michigan. How many acres, did you say?

Mr. PINCHOT. 1,126,000 acres.

Mr. McLAUGHLIN of Michigan. Did the State acquire that land by purchase or by gift?

Mr. PINCHOT. All of it, with the exception perhaps of 200 or 300 acres, by purchase.

Mr. McLAUGHLIN of Michigan. And it is land that was not considered suitable for agriculture?

Mr. PINCHOT. It was bought at an average price of \$2.28 an acre, which means that for the most part it was devastated land.

Mr. McLAUGHLIN of Michigan. And largely in the mountains?

Mr. PINCHOT. Entirely in the mountains.

Mr. McLAUGHLIN of Michigan. Are you doing something in the way of reforestation?

Mr. PINCHOT. We are planting to some extent but we can give away and have planted by private individuals in the State all the seedlings that we are able to raise in the State nurseries now. This year we gave away something over 3,000,000 young trees. Next year we will give away something like 4,000,000, and the plans of the department provide within the next five years for raising that output to 20,000,000 three-year-old plants a year.

Mr. McLAUGHLIN of Michigan. Are you able to encourage to any extent private interests to take up reforesting, or the protection of the forests?

Mr. PINCHOT. Practically not at all. There are a few isolated and unimportant cases. The difficulty, Mr. McLaughlin, is the enormous areas that are at stake.

Mr. McLAUGHLIN of Michigan. If the areas are so large, some of them ought to be available.

Mr. PINCHOT. The difficulty is to get them planted. The State of Pennsylvania has been planting for 16 years, as I remember it, and has just succeeded in planting over 20,000 acres, and during that time the amount of devastated land has increased by millions of acres, and the same fact that is true in Pennsylvania is true all over the Nation. Efforts at reforestation are steadily falling behind in the race with forest destruction.

Mr. McLAUGHLIN of Michigan. And you have been unable to get the kind of legislation you think necessary for the reasons you have stated.

Mr. PINCHOT. I can give you a concrete illustration, perhaps, that will answer the question which I know is in your mind. Pennsylvania has greatly needed additional resources and money. At the last session of the legislature a proposition was made to tax the coal lands of the State as a means of raising this revenue. The tax on anthracite coal went through, because Pennsylvania has all the anthracite coal there is in the United States, but the moment the proposition was made that the bituminous coal should be taxed, the soft-coal people came into Harrisburg and said, "If you put a tax on soft coal in Pennsylvania, you will put us at once at a disadvantage with our competitors in West Virginia."

Mr. CLARKE. How much was that tax—1 cent or 2 cents?

Mr. PINCHOT. It was a very small tax per ton. I have forgotten just what the amount was. The result, of course, was that nothing was ever heard again of the proposition to tax soft coal.

Mr. CLARKE. Do you think that was a just criticism if the tax was only 1 or 2 cents a ton?

Mr. PINCHOT. I am not trying at the present moment to bring up the question of whether it was just or not. I am simply trying to illustrate the fact that certain kinds of objection are conclusive before a political body like a legislature.

Mr. McLAUGHLIN of Michigan. At one time, before I came to the House, I was connected with a commission in Michigan having to do with taxation, and we studied the tax methods of other States, and we heard a great deal about the very fine tax laws of the State of Pennsylvania and how nicely they were operating. I am surprised to hear what you say about the difficulty Pennsylvania has in raising money that is needed for these very important propositions. You have not been able to get the State Legislature, in a State that has the authority to do just as it pleases in these respects, to pass the legislation which you think necessary. Do you think it feasible or possible for Federal legislation to invade that State and do what your own people are unable or unwilling to do?

Mr. PINCHOT. I do.

Mr. ASWELL. And do you recommend that?

Mr. PINCHOT. Very strongly. I believe that the only possible solution of this forest question is a Federal law. I think it is entirely impossible to get legislation through the different States.

Mr. ASWELL. And usurp the control of the States?

Mr. PINCHOT. No; not usurping the control of the States, but exercising a recognized Federal power.

Mr. ASWELL. Over their protest, if need be.

Mr. PINCHOT. It may be over the protest of some of the States; I do not know.

Mr. ASWELL. I mean over the protest of your legislature. You say the legislature is hopeless, and now you propose by a Federal law to step in and over their protest enact such a law anyhow.

Mr. PINCHOT. I do not think there will be any protest in the State of Pennsylvania.

Mr. McLAUGHLIN of Michigan. But in the face of their deliberate neglect.

Mr. PINCHOT. Yes; in the face of their deliberate neglect. This is the fact, Mr. McLaughlin, we are all talking indirectly, I take it—

Mr. McLAUGHLIN of Michigan (interposing). We are talking directly now.

Mr. ASWELL. Absolutely.

Mr. PINCHOT. We are talking absolutely directly, but we are referring—let me put it in that way—to sections 1 and 2 of the Snell bill; at least, that is what is in our minds. Sections 1 and 2 of the Snell bill contemplates that the States shall take certain action for the protection of the forests.

Mr. McLAUGHLIN of Michigan. Are you entirely right about the construction of sections 1 and 2? The first portion of section 1 would seem to require a consultation between the Secretary of Agriculture and the State authorities in the direction of determining a policy. Another portion of the same section would seem to give the Secretary of Agriculture entire authority to determine the policy. I have not examined the bill carefully enough to see whether those two provisions are in conflict, but my first reading of them would seem to show they are a little inconsistent. The later provision in section 1, found on page 2, would seem to me to give the Secretary of Agriculture entire authority to determine the policy as to when and how timber shall be cut and how cut-over lands shall be used, and so on.

Mr. PINCHOT. Provided the State legislature takes action.

Mr. McLAUGHLIN of Michigan. If I am right about it, the legislatures of the Western States where these large timber holdings are have the authority to determine the policy, and I venture to differ from you in your statement that this bill would leave the fixing of the policy entirely in the hands of the States out there.

Mr. PINCHOT. Are we not talking, perhaps, a little bit at cross-purposes? Under this bill the State can accept the terms of the subsidy which it provides shall be given by the Federal Government or it can not accept them. Its option is to take it or leave it. If the State takes it, the State itself determines to accept the policy set down by the Department of Agriculture. If the State refuses to take it, then it fixes its own policy. In other words, the decision as to what it shall do is wholly in the hands of the State.

Mr. McLAUGHLIN of Michigan. And leave it practically as it is now?

Mr. PINCHOT. Yes.

Mr. TEN EYCK. Is there not a further option on the part of the private owners as to whether they will come in and work under it or not. There is no mandatory provision that the private owners of the forests shall come in even after the State does accept it.

Mr. PINCHOT. That is perfectly true.

Mr. TEN EYCK. I would like to hear what you have to say about sections 1 and 2, and how those two sections appeal to you.

Mr. McLAUGHLIN of Michigan. As you do that, will you have in mind, if you will permit me to read it, the second portion of section 1, "And the Secretary of Agriculture is further authorized, on such conditions as he may determine to be fair and reasonable in each State, to cooperate with the various States and through them with private and other agencies within the States in bringing into effect such essential requirements favorable for forest protection and renewal with a view to furnishing a continuous supply of timber for the use and necessities of the people of the United States." That would seem to place it entirely in the hands of the Secretary of Agriculture, if he is going to do anything; otherwise, it would be left entirely with the States, just as it is now.

Mr. PINCHOT. Yes; but you will observe there is no mandatory provision of any kind there.

Mr. McLAUGHLIN of Michigan. Can we impose a mandatory provision on a State?

Mr. PINCHOT. Not by that method.

Mr. McLAUGHLIN of Michigan. Has the Congress any authority to do it by any method?

Mr. PINCHOT. Yes; the Congress has authority to tax.

Mr. McLAUGHLIN of Michigan. Oh.

Mr. PINCHOT. And the bill, which I believe is along the line which will ultimately be adopted, provides for the regulations of timber cutting on private lands through a tax.

Mr. McLAUGHLIN of Michigan. You are speaking of the Capper bill?

Mr. PINCHOT. Yes.

Mr. ASWELL. Why do you say you think it will ultimately be adopted.

Mr. PINCHOT. Because I think it is obvious that the methods proposed in sections 1 and 2 of the Snell bill never can be adopted, and would not work if they were. Indeed, I feel so strongly so that I have not planned to discuss the matter at all before the committee unless the members of the committee desire to have me do so.

Mr. McLAUGHLIN of Michigan. I think that is very important.

Mr. TEN EYCK. I would like to hear you on that.

Mr. McLAUGHLIN of Michigan. As far as I am concerned, I do not want to take you away from your line of discussion—

Mr. PINCHOT. I have no particular line of discussion.

Mr. McLAUGHLIN of Michigan. But before you leave, I would like to have you take that up.

Mr. PINCHOT. I will be glad to discuss that, naturally, if the committee desires me to do so. The situation is just this: Sections 1 and 2 do provide, as I see it, that what shall or shall not be done in the matter of the timber supply of the country depends upon the action of the legislatures of the timber-exporting States. There are at present 15 timber-exporting States. Inside of 10 years, and I think a good deal less than that, there will be only 5, at the outside, timber-exporting States.

Mr. McLAUGHLIN of Michigan. In what length of time?

Mr. PINCHOT. Less than 10 years.

Mr. KINCHELOE. Do you mean by exporting States, States that export timber from this country?

Mr. PINCHOT. No; I mean States that are able to supply their own needs and have a little surplus for export. There are 33 States that are now dependent for their timber supplies on other States of the Union, and those States include the great majority of the most populous and most powerful States like Michigan, Illinois, New York, Ohio, Indiana, Pennsylvania, Iowa, and so on. Those timber-importing States, like my own State of Pennsylvania, can not do business unless they get the wood from the timber-exporting States. Their agriculture and their prosperity is absolutely dependent on supplies from outside. Pennsylvania imports four-fifths of its timber, and Iowa, I suppose, imports nine-tenths. Now, the people who live in the 33 timber-importing States, the Commonwealths that are short of timber, include already more than three-fourths of the people of the United States, and inside of 10 years they will include 95 per cent of them, if the population remains about as it is now. In accordance with the resolutions which I submitted from the forest commission of Pennsylvania, it is true, as I understand it, that if sections 1 and 2 of the Snell bill become law, the decision as to whether or not these greater States and more numerous States of the Union are to have lumber at all would be left to the legislatures of the few timber-exporting States over which the people of the timber-importing States have no influence at all, unless they can have it through the National Government.

It would seem to me so evident that sections 1 and 2 of the Snell bill are hostile to the economic interests of the great mass of people of the United States that I have never believed there was any chance whatever for its enactment and do not believe so now. Moreover, if the bill were to be enacted, then it is perfectly obvious to me, at least, that it would never be given effect for the reason that what you would do then would be to put the question of the preservation of the timberlands of the country in the hands of the legislatures of the States where the lumbermen are most powerful, and take away from the people of the States where the consumers are powerful—and they are the most of us and the most important—anything to say as to whether or not that timber should be preserved. The illustration which I gave you a little while ago as to how the soft-coal question was treated in Pennsylvania seems to me to be a perfect illustration of what would happen if sections 1 and 2 were ever enacted, and the legislature of an individual State were asked to place upon its lumbermen restrictions or added expenses that had not been placed on the lumbermen of competing States. In other words, my view of sections

1 and 2 has been that they never would be enacted, in any case, and in the second place, they would not work if they were.

Mr. ASWELL. The lumbermen have not objected to it in these hearings.

Mr. PINCHOT. Precisely not.

Mr. ASWELL. The representative lumbermen of the whole country are here and have not made any protest about there being any additional tax at all.

Mr. PINCHOT. I realize that.

Mr. ASWELL. That conflicts with what you have just said.

Mr. PINCHOT. I think not.

Mr. CLARKE. I do not follow you on that.

Mr. TINCHER. I think you appeared before the committee in the former Congress against this same idea.

Mr. PINCHOT. Yes.

Mr. KINCHELOE. Of course, the theory of the enthusiasts of this bill, especially sections 1 and 2, has been that they will induce these States that have not the timber and are importing States, as you term them, to grow timber at home in order to avoid the freight rates, etc. What do you think of that?

Mr. PINCHOT. They will do that anyway.

Mr. CLARKE. Will not the people of your own State, for instance, if this bill is put through, come along and compel your legislature to get up to date with some progressive legislation looking to a reforestation policy?

Mr. PINCHOT. Not by this bill. They are doing that. Let me say that the inducement which is offered in the Snell bill to the individual States to enact legislation penalizing the lumbermen in that particular State is already in effect in Pennsylvania, and they are giving us an appropriation for fire protection.

Mr. KINCHELOE. How would it penalize the lumbermen to reforest the land that is not suited for agricultural purposes and to protect their lands from fire? I am asking that simply for information.

Mr. PINCHOT. That is a perfectly fair question. Suppose you are a lumberman in Oregon and the proposition was to require you to spend, we will say, 50 cents a thousand or \$1 a thousand in reforestation. That would enter into the cost of your logging, and your logs when they got to the mill would cost you \$1 a thousand more than the logs of your competitor across the line in Washington; and the legislature of Oregon would be asked, under the Snell bill, to impose an additional tax of 50 cents or \$1 or 75 cents, or whatever it may be, on the lumbermen of Oregon as against their competitors in the State of Washington, and, of course, the immediate answer of the legislature would be exactly the same as the answer of the soft coal men in Pennsylvania, "We are not going to do it."

Mr. KINCHELOE. Would not what they would get from the State in the way of appropriations and the Federal Government aid offset that 50 cents?

Mr. PINCHOT. They would not get anything additional. They would get it for fire protection only, and they are getting that anyway.

Mr. KINCHELOE. Under this bill, the money is for reforestation and fire protection, and all that sort of thing.

Mr. PINCHOT. My recollection was it was only for fire protection.

Mr. ASWELL. What provision in this bill requires lumbermen to pay \$1 a thousand for reforestation or authorizes or permits that?

Mr. PINCHOT. There is no specific provision at all; but it provides, as Mr. McLaughlin pointed out, that the Secretary of Agriculture is to establish certain standards, and in what I had to say I was assuming that the carrying out of those standards would cost 50 cents or \$1 a thousand.

Mr. ASWELL. What information have you on which to conclude that the Secretary of Agriculture would impose \$1 a thousand on logging?

Mr. PINCHOT. The information I have is some considerable experience with the national forests and knowing what it costs to practice forestry on the national forests as against the ordinary destructive methods which these lumbermen practice.

Mr. JACOWAY. Do you think a bill of that kind would be constitutional?

Mr. PINCHOT. To be perfectly frank with you, I do not think my opinion as to the constitutionality of the bill is worth a cent.

Mr. JACOWAY. I thought you might have heard somebody say something about it.

Mr. PINCHOT. Do you mean the Snell bill or the Capper bill?

Mr. JACOWAY. I am referring to compelling a man to reforest his private land as he cuts it over.

Mr. PINCHOT. My own belief is, and, of course, it is based on the opinions of lawyers in whom I have confidence, and Mr. Wells is here, who has had particular capacity to consider this question, and has done so very thoroughly—my own feeling has been that anything that is affected with a public use, as the ownership of timber lands which are subsidized by the National Government for fire protection and other purposes undoubtedly is, then it is perfectly right for the Federal Government, just as in the case of a public service corporation, to require a return for the benefits it confers.

Mr. JACOWAY. Mr. Pinchot, it is not exactly germane to this matter, but I would like to ask you, if you know, how many acres of Government land were taken up under what was known as the Santa Fe warrants.

Mr. PINCHOT. I could not give you the figures.

Mr. JACOWAY. Could you approximate it?

Mr. PINCHOT. Perhaps Mr. Wells can.

Mr. WELLS. I do not know what the figures are.

Mr. JACOWAY. I want to ask you whether under those warrants and under some legislation that was passed by the Federal Congress they were permitted to exchange lands that they already had—

Mr. PINCHOT (interposing). It permitted them to exchange lands they had for lands they did not have.

Mr. JACOWAY. Do you know whether the lands they did have were worthless and that lands they exchanged for were worth as much as \$50 an acre?

Mr. PINCHOT. I had something to do with that exchange. We did our level best to get, on the whole, an even division, and I think we came pretty near to that. Whether we actually did it or not, I do not know.

Mr. JACOWAY. You did not in our State, and if you were a party to that crime, you failed in your purpose. I want to tell you what happened in our State. Lands in the West that were worth comparatively nothing were exchanged for Government lands in Arkansas that were worth \$50 an acre.

Mr. PINCHOT. Yes, I realize that; but on the other hand, you must remember a good deal of the lands exchanged in the West was very valuable.

Mr. JACOWAY. Where?

Mr. PINCHOT. A lot of the land in and around the San Francisco Mountains in Arizona that was heavily timbered. I have been over that land myself.

Mr. JACOWAY. Was not a lot of land exchanged that did not have a stick of timber on it?

Mr. PINCHOT. There was some land of that kind but not very much. I will say that in this particular case, and in a good many others, you can not quite hold the executive officers responsible. Congress has to take some of the blame because it passed laws governing exchanges which were very much in the interest of the private owner. For instance, when it came to the old forest lien selection law, there was the right of a man to pick out his exchange lands anywhere he liked, and there was no provision in it for equality of value but only equality of area. It was a most unfortunate law, and I am very proud to say I had something to do with having it repealed.

Mr. JACOWAY. Do you know how the law operated in order to effect that exchange?

Mr. PINCHOT. I can not remember the details of it, I am sorry to say. It was nearly 20 years ago.

Mr. JACOWAY. Did not the old law provide that the man who owned the land had to live upon it?

Mr. PINCHOT. No. You understand this, was a railroad-land grant and the exchange was made with the railroad company in order to consolidate the holdings of the National Government in the Coconino National Forest and others in that neighborhood. I can easily get you the information about the whole thing.

Mr. JACOWAY. I would like to have it.

Mr. JONES. Mr. Pinchot, how much timber land does the State of Pennsylvania own in Pennsylvania?

Mr. PINCHOT. One million one hundred and twenty-six thousand acres.

Mr. JONES. How much does the National Government own in Pennsylvania?

Mr. PINCHOT. It does not own any yet, but it will own, we hope, some six or seven hundred thousand acres.

Mr. JONES. How much private timber lands are there in Pennsylvania?

Mr. PINCHOT. The total area in the State, according to figures just compiled by the department of forestry, is 13,046,000 acres.

Mr. JONES. How much cut-over land is there in Pennsylvania that has not been reforested.

Mr. PINCHOT. It is practically all cut over and that which has not been reforested is at least 6,000,000 acres.

Mr. JONES. Has your State Forestry Association data that is reasonably accurate as to the character of timber that exists in Pennsylvania?

Mr. PINCHOT. Yes; fairly so.

Mr. JONES. And as to the amount of timber, in a general way.

Mr. PINCHOT. Yes. We figure, and I think in fact these are the figures of the National Forest Service, there are about 11,000,000,000 feet in the State.

Mr. JONES. That is, enough timber to make 11,000,000,000 feet of lumber?

Mr. PINCHOT. Yes.

Mr. JONES. And you have the information as to the number of acres held by private owners and as to the number of acres held by the State?

Mr. PINCHOT. Yes.

Mr. JONES. And as to the character and quality of the timber?

Mr. PINCHOT. We have no accurate survey of the character and quality of the timber, but we know it in a general way.

Mr. JONES. Do you know the number of acres it covers?

Mr. PINCHOT. We know the number of acres it covers.

Mr. JONES. Is your forest association perfectly willing to furnish to the National Government, or its officers, such information that you have along that line?

Mr. PINCHOT. Absolutely.

Mr. JONES. You have no reason to conceal it?

Mr. PINCHOT. None whatever.

Mr. JONES. Has there been any effort of the private owners to conceal what they have?

Mr. PINCHOT. None whatever.

Mr. JONES. And they are perfectly willing to furnish their information to your department or to the National Government?

Mr. PINCHOT. Yes. In fact, it is not a question of their being willing to furnish it, because the records of the State give us the facts, and we simply have to compile them.

Mr. JONES. Do you think your State forest association possesses such information as is necessary in order to shape the general policy of the State?

Mr. PINCHOT. Entirely so.

Mr. McLAUGHLIN of Michigan. You spoke of the prospect of the Federal Government acquiring land in Pennsylvania; by what means?

Mr. PINCHOT. By purchase.

Mr. KINCHELOE. Under the Weeks bill?

Mr. PINCHOT. Under the Weeks bill.

Mr. McLAUGHLIN of Michigan. For the protection of navigable streams?

Mr. PINCHOT. Of course the amount of money they have to spend will control how much they will buy, but the prospect is they will buy on the watershed of the Allegheny River tributary to Pittsburgh.

Mr. PURNELL. Following the line suggested by Congressman Jones of Texas a moment ago, you have already given evidence to me, and I know to the committee, of the fact that you have full information in regard to the resources of the State of Pennsylvania. In discussing yesterday the matter of making the survey of the various States the statement was made that it would be impossible to get this information from the several States, and what I want to ask you is, Do you of your own personal knowledge know that other States besides Pennsylvania could furnish the Federal Government with such information as you are able to give?

Mr. PINCHOT. I am sorry to say I do not know of my personal knowledge, but, perhaps, I could answer your question in this way.

Mr. PURNELL. What is your opinion, based upon years of experience?

Mr. PINCHOT. My opinion is we have abundant information now as the basis for a sound and effective forest policy.

Mr. PURNELL. Do you regard that information as reasonably accurate for the purposes contemplated by this bill?

Mr. PINCHOT. Abundantly accurate for the purpose of establishing a policy; yes.

Mr. PURNELL. Let me ask you further, do you regard it as necessary to have that information accurately before establishing a national policy?

Mr. PINCHOT. Absolutely not. There is no reason for it in the world, in my opinion.

Mr. KINCHELOE. I have great faith in your experience and knowledge of this forest situation, and I understand from you that you are very much opposed to sections 1 and 2 of the Snell bill. I would like for you to give your own idea of the character of a national policy that we should embark upon and indicate in what way Congress can and should be of assistance in the matter.

Mr. PINCHOT. I think there are four or five different things that ought to be done. The first big thing to be done is to stop the devastation of privately owned timberland which is now going on. The second big thing to be done is to stop fires. But the first thing is to stop this devastation. Now, that can only be done, in my judgment, for various reasons, some of which I have given you, by national enactment of such a law as will apply uniformly to all the States at the same time. The best way in which that can be done, as I understand it, is through taxation, following the analogy of the oleomargarine bill and a number of others, and the Capper bill, which I had not intended to bring before this committee at all, in my judgment, meets the problem in a very satisfactory way.

That bill provides that the Secretary of Agriculture shall establish standards, just as sections 1 and 2 of the Snell bill do, and that those standards having been established in cooperation with the lumbermen and others and the State forest officers in the different regions of the country, the lumbermen who cut in accordance with those standards shall pay 5 cents a thousand tax and the lumberman who does not shall pay \$5. The bill itself would raise in that way money enough to be self-supporting. Its enforcement would cost the Government nothing. It would apply uniformly to all of the States at the same time and would leave the conditions of competition between the lumbermen untouched. It would go into effect the moment it was enacted instead of having a long campaign in the State legislature after the Federal law had been passed; and in my judgment it would be simple and easy to enforce and would meet the needs of the situation.

Before I sit down, with the permission of the committee I want to deal for a moment with the reasons why I think this forest question is far and away the biggest economic question before the people of the United States. I think I realize there is very small prospect in this session of Congress for the passage of any forest legislation establishing a policy, but I do think there are certain things that can be done now and that ought to be done. I think we ought to have more money for cooperation with the States in fire prevention. As commissioner of forestry in Pennsylvania I have had an opportunity to see how exceedingly valuable even the comparatively small sums that go into the various States are in keeping up the standard of work, in inducing the States to take action, and generally stimulating fire protection. We are getting this year, \$27,500.

Mr. ASWELL. Mr. Pinchot, may I interrupt you just there? I understood you to say that you would object to the cooperative part of this bill, leaving it to the legislatures to cooperate at their will with the Federal Government. Now, in your next statement you say that this cooperation with the States in fire protection is a most excellent thing.

Mr. PINCHOT. It is.

Mr. ASWELL. What is the difference in the two principles?

Mr. PINCHOT. One of them works and the other will not.

Mr. ASWELL. That is a matter of opinion.

Mr. PINCHOT. Of course; and so are all the rest of these things. All of my testimony is a matter of opinion.

Mr. JACOWAY. Mr. Pinchot, you say that under the Capper bill there is a tax of 5 cents per thousand, provided the lumbermen cut in accordance with the instructions or the standards established?

Mr. PINCHOT. Yes, sir.

Mr. JACOWAY. Preliminary to the question I am going to ask you, what percentage of 1,000 feet of lumber would be of the better or higher grade?

Mr. PINCHOT. It would depend entirely on the size of the logs, the species, the amount of rot, and so on.

Mr. JACOWAY. Would 20 per cent be too high?

Mr. PINCHOT. I do not think so.

Mr. JACOWAY. And then, would the other two grades run about 40 and 40?

Mr. PINCHOT. They might run something like that.

Mr. JACOWAY. If you cut lumber in accordance with the provisions of the Capper bill, would not the result be that the lumberman would find himself with a lot of low-grade lumber on hand which he could not ship on account of the freight rate?

Mr. PINCHOT. It would make no difference to him.

Mr. JACOWAY. And he would produce every foot of that lumber at an economic loss?

Mr. PINCHOT. No. The answer is perfectly clear.

Mr. JACOWAY. I would like to hear your answer to that question.

Mr. PINCHOT. The answer is that many billions of feet of lumber—how much is the National Forest Service selling every year?

Col. GREELEY. About 1,000,000,000 feet.

Mr. PINCHOT. About 1,000,000,000 feet is being sold on the national forests every year, under substantially the same regulations and in the same localities as, in my judgment, would be the case under the Capper bill, and lumbermen are doing business without the difficulty which you suggest. In other words, the Capper bill is intended, and I believe would have the result, of applying to the commercial timberlands of the country regulations substantially similar to those which are being successfully applied now on the national forests. In other words, it is a practical proposition.

Mr. JACOWAY. How many feet of lumber have they sold off of the forest reserves in the last year?

Mr. PINCHOT. About 1,000,000,000 feet. May I just continue and state two or three other things which I think ought to be done?

The CHAIRMAN. Would you prefer to go on with your statement without interruption and then answer any questions that may be asked?

Mr. PINCHOT. If I may simply finish this part of my statement, then I will be glad to answer any questions. First, I think there ought to be money appropriated for cooperative fire protection. Then I think a similar stimulation could be brought about, that would be very valuable, by cooperative planting. The results you get by that sort of thing are considerably larger than the amount of money that is spent. I think that more land ought to be bought for national forests, and I think that the timbered public domain and the timbered Indian reservations ought to be classified so that those parts of them which properly ought to go into national forests can be placed there. I understand these are things that Mr. Greeley suggested he would be glad to have the committee report on, and I am very glad to back up his suggestion that the report should be along that line. Of course, these other matters of a little bit more money for this and a little bit more money for that, desirable and important as they are, leave the whole big question untouched.

Now, Mr. Chairman, may I say a word about this economic question?

The CHAIRMAN. Certainly; you may proceed in your own way.

Mr. PINCHOT. I feel very strongly about that. It is a large statement, of course, to make, that the biggest economic question before a Nation such as ours is this timber question, but I think the proof is absolutely clear and irrefutable. Half of the sawed lumber used in the whole world is used in the United States, and there is no other country that has established its agriculture and its industry on a basis of so lavish a use of wood as this country of ours. Our whole standard of living, our whole business and commercial organization, is based on the use of about 300 board feet per capita, where the nations of Europe use only half as much. We are now facing the absolute certainty, within a comparatively small number of years, of having to reduce that consumption of timber; and timber is the most universal of all materials and has more to do with the standard of living, in my judgment, than any of the other basic materials. We are facing the necessity of having to reduce that to one-half or perhaps to one-third. That is going to mean a complete overturning of our methods of agriculture and industry.

You understand that half of all the wood used in the United States is used on the farms. It takes one-half of our total consumption of timber to grow our food. Then, after that food has been grown, it has got to be shipped by rail. You gentlemen know all that I am going to say about that. You can not ship a pound of wheat without the help of the forest. You can not load a box car, you can not get out a railroad tie, you can not mine a ton of coal or a pound of iron without the forest. You can not provide a suit of clothes without the forest, or eat a meal without the forest. The whole thing is interwoven in our national life to a point that makes the use of wood in some sense

the critical thing in establishing our costs of living and our commercial and individual welfare. It is the key to our individual safety and comfort and prosperity.

Now, that being true, we are coming as a Nation right square up against the place where our own supplies will be exhausted, and very completely exhausted, just as our supplies in Pennsylvania are; and we are facing a situation where we can not get what we have not at home anywhere else in the world. I do not think the people generally have come to realize what the thing means. All the great civilized nations of the world, with three or four exceptions, are timber-importing nations. We are not yet, but as individual Commonwealths we are, in an overwhelming degree—two to one. The nations of Europe are far more so than the States of the American Union.

All the big nations of Europe, with the exception of Russia, Sweden, and Norway, and Finland, a small nation, part of Rumania—the recent small Governments are so mixed up that I can not name them—but with the exception of those four or five nations all the nations of Europe are unable to supply the needs of their own people. Germany has been a timber-importing nation since 1870. France, England, Italy, Spain, Portugal, Greece, Holland, Belgium, and all the rest of them are obliged to go to the few parts of the world that have got timber yet and bring it in. In other words, there is nothing we can expect from Europe when our pail goes dry. As to the Canadians, if we got every stick they have it would only keep this Nation going about 20 years.

Mr. McLAUGHLIN of Michigan. Mr. Pinchot, I think it will not interrupt you if I ask you this question: Do you know what percentage of our cut in this country is exported out of the country?

Mr. PINCHOT. A very small, but a very rapidly increasing percentage. The last figures I have was that about \$200,000,000 worth a year was going out, and I happen to know that in the first six months of 1921, 90,000,000 feet were shipped from the Pacific coast to Japan alone. Our export of timber is likely to increase very largely.

The CHAIRMAN. Where is that timber exported from?

Mr. PINCHOT. From the Pacific coast.

The CHAIRMAN. Does much of it come from the forest reserves?

Mr. PINCHOT. Very little. Only 3 per cent of our total cut comes from the forest reserves.

The CHAIRMAN. I mean of that which is exported.

Mr. PINCHOT. None, so far as I know.

Mr. McLAUGHLIN of Michigan. You are not able to give that in its percentage to our total cut?

Mr. PINCHOT. I could if I had an arithmetical mind. Our total cut is about 36,000,000,000 board feet and 90,000,000 is a very small percentage of that. That is what went to one small country alone in six months.

Now, to return, the Canadians are not going to help us out much. They have made that perfectly clear, and, as I said, if we took everything they have got, it would be gone in 20 years. Mexico is a timber-importing country right now. Mexico imports about one half the wood it uses, although it has considerable areas of tropical wood and a great deal of undeveloped timber, and yet from the gigantic necessities we have of half the sawed lumber of the whole earth, the Mexican supply is not large. Every nation in South America, so far as I know, is a timber-producing nation. Brazil imports, if my memory serves me rightly, about 70 per cent; the Argentine, I think, about the same; and all of them are timber-importing nations. Of course, there is a vast body of hardwood in the Amazon valley, but it is not the kind of timber we use; and as you follow this matter around the world you get the same result. Australia is a timber-importing region.

Mr. JACOWAY. Do they not import a lot of this timber because they have not the facilities for getting it out as cheaply as we can? In other words, have they not the supply of timber within their own domain which they could utilize if they had the facilities for getting it out?

Mr. PINCHOT. Most of them have not. There is a great deal of Parana pine in South America which eventually will come into the market, but the difficulty is that as new regions are developed there are such larger demands made upon the forests that the total result is the new development does not help us any.

The United States is in this exact situation, and I think this statement can not be successfully controverted, we are facing a time in the very near future

when this absolute necessity of life, as we have it now, is going to be short and when we can not get it outside of our own boundaries except at excessive prices, and not very much of it at that. In other words, I think it is a fair thing to say that the biggest economic question before this Nation, far and away, is this matter of where we are going to get the lumber, without which we can not grow crops or manufacture goods or ship goods or do business. I wanted to present that as strongly as I could in this statement to the committee, because the thing is just beginning to be understood. I want to make the point, too, that this timber question is vastly more important to the States and to the regions that have not got any timber than it is to the timbered ones. Take my State of Pennsylvania, the Pittsburgh region alone uses as much timber as the whole State produces, and if it were not for the timber that comes in from the outside there would be an absolute collapse of industry in the State of Pennsylvania. It is enormously more important to us what happens in the forested States, than it is to the people in those States, because all we can expect to get is the crumbs that fall from their table. It is exactly so with the great agricultural States. They have got to depend on the lumber from elsewhere, and it is a whole lot more important to them what happens to the forests in Washington, Oregon, and California, that have half of the timber in the United States, than it is to those States themselves, because as long as there is any lumber the people in the States where it is will get it.

Another thing, it is the man in the city who is going to feel this pinch first. You grow crops on the farm, taking one-half the wood used in the United States, and when they are grown you have got to move them. You have got to transport them and you have got to pack them. It takes something like one-fifth of all the sawed lumber, according to a figure that has been given to me, used in the United States for packages alone, and the fact of the matter is that it is the people in the big centers of population and in the densely populated States that are mainly concerned in this thing and whose interests have got to be first considered.

It is not going to be the foresters who will settle this question and it certainly is not going to be the lumbermen. It is going to be the great mass of consumers among the people of the United States, and the sooner they can be made to understand how critical their situation is, the better it is going to be for them, in my judgment.

Mr. KINCHELOE. Would you favor a policy forbidding the export of lumber?

Mr. PINCHOT. I would favor it like a shot, if it can be done under the Constitution.

Mr. ASWELL. Mr. Pinchot, you have presented this national crisis with very illuminating effect. Would not a statement like that from you move the whole Pennsylvania legislature to action?

Mr. PINCHOT. In the first place, it would not, and in the second place, it would not make any difference what we do in Pennsylvania, because we are not able even to meet our own needs.

Mr. ASWELL. I mean in getting ready to meet them and providing for the growing of new timber and protecting the timber you have.

Mr. PINCHOT. That we are doing, and I did make such a statement that I got the largest appropriation for fire protection that has ever been made in any State.

Mr. ASWELL. My impression is that your Pennsylvania legislature is the greatest stumbling block and I have less faith in it than you have in the legislatures of the States that have timber standing.

Mr. PINCHOT. The only answer I can make is that I have been up against it.

Mr. GERNERD. I can not sit by here and let you make that statement.

Mr. ASWELL. All right; correct it.

Mr. GERNERD. I will put my State alongside of any State in the Union.

Mr. PINCHOT. I will join you right away.

Mr. GERNERD. The fact is that Mr. Pinchot has just started this work; I do not think it has been going more than three years.

Mr. PINCHOT. Two years.

Mr. GERNERD. And I want to say in his presence, although I have never met him before, I will say right here that he has done marvelous work and the people are just becoming conscious of it.

Mr. ASWELL. I did not have reference to Mr. Pinchot. I agree with you. I had reference to the legislature.

Mr. TINCER. Admitting that the Keystone State still exists and referring back to the legislation which is before the committee, I believe I begin to see

under the Weeks law have been very instrumental in preserving the timber lands of the country?

Mr. PINCHOT. It has been very valuable; yes. The money has been spent almost entirely in the East, where there were no national forests, and it has been a very admirable thing.

Mr. TINCHER. Mr. Pinchot, it has been suggested by my friend from a lumber section that there is some fear that if the Capper bill becomes a law it might increase the price of lumber. I was wondering if that is the reason all the lumber organizations are against the bill.

Mr. ASWELL. The lumbermen would not receive the benefit of that increase. It would go to the Government. It would not help the lumbermen any, because that additional price would go to the Government and not to the lumbermen at all.

Mr. TINCHER. Well, the Government could use it.

Mr. KINCHELOE. Mr. Pinchot, let me ask you another question. It is within the purview of this bill, if it is passed, not only to embark on the proposition of the reforestation of State and Government lands, but individual and privately owned lands. Do you really think it would be very feasible to embark on a proposition of trying to reforest these private lands through immunities or subsidies?

Mr. PINCHOT. I do not quite understand your question. Do you mean turning them over to the National Government for reforestation?

Mr. KINCHELOE. It has been stated here, and I presume it is true, that it is not an attractive business proposition to the individual landowner to undertake to regrow timber on his land, because of the years that are required, and so on; but it has been suggested that if the States would give them immunity in the way of taxation, and if the Federal Government and the State would insist in fire protection and in the reforestation, that it might be made sufficiently attractive to be interesting to the private owner to undertake to reforest his land. Do you think that is practical?

Mr. PINCHOT. I think that would depend very much on the individual case and on the whole I do not believe it would accomplish the result sought. I think I can give you a practical illustration of what has happened in Pennsylvania.

Mr. KINCHELOE. I would like to know about that.

Mr. PINCHOT. We have a law there under which anybody can list his land with the State government as an auxiliary forest reserve, so called, and then the land is taxed on a valuation of \$1 a year, no matter what it has on it, as long as it is kept in timber, and when the timber is finally cut 10 per cent of the gross proceeds goes to the State in the form of deferred or delayed taxes. The result of that has been in 8 or 10 years that out of the 13,000,000 acres of land in the State we have 14,000 acres listed as auxiliary forest reserve.

Mr. KINCHELOE. What percentage in the solution of this question, in your judgment, would it be if the national domains and the forest reserves of the country were practically absolutely protected from fire?

Mr. PINCHOT. About one-fifth.

Mr. KINCHELOE. I believe it has been shown here that the Government owns about 156,000,000 acres of forest reserves, and I believe they say there are about 7,000,000 acres of cut-over forest land owned by the various States.

Mr. PINCHOT. There is not that much held as State forests so far as I know.

Mr. KINCHELOE. Some one stated that here, I believe. If there were additional appropriations to protect, as far as humanly possible, these lands, both State and National, from fire, and if there was appropriated money sufficient to reforest wherever that was necessary, do you think that would be a great step in the direction of the preservation of the forests of the country?

Mr. PINCHOT. A great step, but by no means a solution.

Mr. KINCHELOE. You think they ought to go further and extend the appropriations under the Weeks law and buy more land?

Mr. PINCHOT. No; I think all that is good; but I do not think it is a solution of the question at all. There is only one solution, in my judgment, and that is to say definitely, by law, that this devastation on privately owned commercial timberlands must stop. That is the only thing that really counts. Fire protection is good. Do not misunderstand me. Fire protection is admirable, but the essential heart of the whole question is stopping this devastation that is going on.

Mr. JACOWAY. Right there, will you explain just what you mean by devastation?

Mr. PINCHOT. May I finish first my answer to this question, and then I will come back to that, or perhaps it will come in right here. I do not know whether

Mr. JACOWAY. Would it not entail on the small lumberman a very much larger overhead expense?

Mr. PINCHOT. No. I have done quite a lot of cutting of timber in the woods in accordance with the provisions of forestry with small crews, and I believe it is practical.

Mr. JACOWAY. But you cut that timber where you are close to the railroad?

Mr. PINCHOT. Yes.

Mr. JACOWAY. And where you had good roads?

Mr. PINCHOT. Yes.

Mr. JACOWAY. And where the streams were properly bridged?

Mr. PINCHOT. In some cases.

Mr. JACOWAY. And in the majority of cases that overhead charge has been paid for not by you but by the State you were cutting in?

Mr. PINCHOT. The answer to that is that the little man does not go very far back where there are no roads and bridges.

Mr. JACOWAY. Oh, yes; some of them do. In many of the Southern States they are hauling the logs three or four or five miles and they are taking little portable sawmills and cutting up the lumber and then hauling it as much as 20 miles.

Mr. PINCHOT. Yes; and it would be entirely impractical—I think it would be impractical to regulate the cutting of farm wood lots, although the Snell bill contemplates that, as I understand it.

Mr. JACOWAY. The question I want to ask you is whether you would compel that little sawmill man—

Mr. PINCHOT (interposing). No.

Mr. JACOWAY. If the facts are as I have just stated, would you not automatically put him out of business?

Mr. PINCHOT. No. Now, let me tell you why? In the first place, the regulations would make such allowances as were necessary in those cases; and in the second place, the Capper bill would leave the conditions of competition absolutely the same as they are now, and what one man would have to do the other man would have to do.

Mr. ASWELL. It would increase the price of lumber, though?

Mr. PINCHOT. It might increase the price of lumber 5 cents a thousand. I do not think you could tell that.

Mr. CLARKE. How does the increasing price of lumber increase the use of substitutes?

Mr. PINCHOT. There is a good deal of substitution, but the difficulty is that the new uses of lumber increase faster than the substitutes or as fast as the substitutes, so that there is no total saving.

Mr. CLARKE. How much does that increase in the price of timber increase the use of different parts of the trees, as compared with the practices of 10 years ago?

Mr. PINCHOT. There is a very much larger use and lumbering is very much more destructive now than it used to be, because the timber cut is very much smaller than it used to be.

Mr. KINCHELOE. Speaking of the impracticability of sections 1 and 2, is it not also a fact that in the large States that are exporting lumber, there is less sentiment for the preservation of the forest than in those States that are importing lumber?

Mr. PINCHOT. Yes; of course.

Mr. KINCHELOE. And therefore would not the sentiment be adverse to the legislature making these appropriations to meet the Federal Government's money?

Mr. PINCHOT. Of course, sections 1 and 2 make it as difficult as it can be made to get the legislation, for the very reasons stated.

Mr. KINCHELOE. So difficult that you think it is impracticable?

Mr. PINCHOT. I do.

Mr. KINCHELOE. What do you think about section 3, asking Congress to spend \$3,000,000 for additional investigation? Do you think that is absolutely necessary?

Mr. PINCHOT. As I said in reply to Mr. McLaughlin's question, I think it is entirely unnecessary so far as a forest policy is concerned.

Mr. KINCHELOE. You spoke of buying more land for reforestation, and I believe you said you advocated that. That comes under section 6, which authorizes an appropriation of \$50,000. Is it your judgment that the appropriations made

Mr. KINCHELOE. How much more land do you think we ought to buy? Could you give an estimate of that? You say you think we should continue to buy land.

Mr. PINCHOT. I have not got the exact figure in mind, but I am sure Col. Greeley could tell about what is planned.

Mr. KINCHELOE. Do you think the land ought to be bought in different parts of the United States?

Mr. PINCHOT. I think there ought to be national forests in different parts of the United States, as widely scattered as possible. In other words, I think as large a part of the people of the country ought to have the advantage of the national forests as possible.

Mr. GERNERD. Do you not think that lands that are not adapted for agriculture and that have to be retimbered should be eventually acquired, either by the State or by the Government?

Mr. PINCHOT. Land that is good for nothing but to grow timber?

Mr. GERNERD. Exactly.

Mr. PINCHOT. Either that—and a great deal ought to be acquired, anyway—or there ought to be mandatory laws to prevent the destruction of the timber although it may be held in private hands. For instance, I should say the States could not possibly buy the lands in farm wood lots, and they amount to some 200,000,000 acres.

Mr. GERNERD. What do you mean by farm wood lots?

Mr. PINCHOT. Small tracts of land that are held by individual farmers for their own purposes.

Mr. KINCHELOE. If I understand you, Mr. Pinchot, your final conclusion of the whole problem is that with additional appropriations for fire prevention, with a national law forbidding the indiscriminate stripping of forests by private owners—

Mr. PINCHOT (interposing). Of commercially owned timberlands.

Mr. KINCHELOE. And the additional purchase of some more national forests would, in your judgment, be the solution of this problem?

Mr. PINCHOT. Those are the main items, it seems to me.

Mr. KINCHELOE. How much money would that cost to the Federal Government?

Mr. PINCHOT. I could not undertake to give you an estimate. The control of the timber on the privately owned timberlands ought not to cost the Government anything. The tax remission ought to make that self-supporting.

I can not tell you how much the purchase would cost, because I do not know how much there is to be bought, but the total annual appropriations by the Government ought not necessarily to be very large.

I have this feeling. I think it has been proved by the work that has been done in Pennsylvania that it is a perfectly possible thing to get the bulk of the people of the United States, as it has certainly been in Pennsylvania, waked up to the critical situation in which they are which I tried to describe. It has been a perfectly possible thing to wake up the larger part of the people of Pennsylvania, at least enough to stand behind the increased appropriations in the reorganization laws.

In the first place, I believe the farm people are pretty well waked up to it. In the second place, I think it is a simple matter to make the business people understand that they could not do business without forests.

Mr. ASWELL. If the people are waked up in Pennsylvania, why does not the legislature respond to the demands of the people?

Mr. PINCHOT. Because our timber is cut.

Mr. ASWELL. I mean with reference to regrowing timber.

Mr. PINCHOT. I think Mr. Gerner has given you the answer to that. We just started in. I may say that I take great pride in the fact, as I am sure he does, that Pennsylvania has within the last year been assigned the first position at the head of the States in forestry.

Mr. ASWELL. Mr. Pinchot, my question has to do with this. I understood you to say in the beginning of your remarks that you doubted whether the Pennsylvania legislature would enact such laws.

Mr. PINCHOT. The Pennsylvania legislature will never enact a law which will put Pennsylvania lumbermen at a disadvantage with their competitors in other States.

Mr. ASWELL. I do not see how it could, if it does not have any lumber to start with.

The CHAIRMAN. You kindly gave us this morning an estimate of the total supply of lumber in Canada. How about our supply? Can you give us an estimate of what that is?

Mr. PINCHOT. My understanding of the fact is that if everything in the United States were cut, the United States Forest Service estimates it would last about 50 years.

Mr. GERNERD. Is that on the assumption that our exports would not increase? Mr. PINCHOT. That our exports would not increase and that destruction by fire would not be important.

The CHAIRMAN. That is, at the present rate it would last that long?

Mr. PINCHOT. Yes, sir. But that is not the essential fact. The essential fact is that we have now about one-sixth of our original virgin timber left, and that that is being cut at a rate that will completely exhaust it in 25 years, and that contains about three-fourths of our standing stumpage. You see, you do not have to wait until an absolute necessity like lumber is gone before the prices rise.

The CHAIRMAN. By proper regulation that could be conserved, could it?

Mr. PINCHOT. We could very much modify the severity of the coming timber shortage if that were properly handled.

The CHAIRMAN. What is your idea about encouraging private owners?

Mr. PINCHOT. I think everything that could be done in that direction is good, and I think the experience of the world is perfectly clear, that in most of the forest areas nothing but mandatory legislation will do any good.

The CHAIRMAN. How about the nonproducing timber States? Can they be encouraged, and if so, in what way?

Mr. PINCHOT. Yes; but there will never be much timber produced in the great agricultural States, like Iowa, for instance. The land in those States is too valuable for other purposes.

The CHAIRMAN. Well, it would not take very much of the 6,000,000 farms if it were gone into generally?

Mr. PINCHOT. Well, the average consumption of lumber on the farms in the United States is, I understand, about 2,000 feet a year. It takes quite a lot of wood to produce 2,000 feet a year.

The CHAIRMAN. That is the average per farm that is being grown?

Mr. PINCHOT. No; being used.

The CHAIRMAN. Have you an estimate of the amount that is grown?

Mr. PINCHOT. In the United States?

The CHAIRMAN. Yes; on farm wood lots.

Mr. PINCHOT. No; I do not know that.

Mr. PURNELL. Would you advocate, Mr. Pinchot, the Federal Government doing any part of the replanting of privately owned lands?

Mr. PINCHOT. I advocate the encouragement of planting.

Mr. PURNELL. What about the Government actually assuming any of the expense?

Mr. PINCHOT. I should say that the Federal Government, except in the matter of furnishing planting material—and that only in full cooperation with the States—ought not to bear any of the expense of replanting privately owned timberlands.

The CHAIRMAN. You spoke a little while ago with reference to the tax exemption in Pennsylvania. Has that encouraged the growing of timber in Pennsylvania?

Mr. PINCHOT. Practically not at all.

The CHAIRMAN. Do you not believe that that policy would encourage the growing of timber in general?

Mr. PINCHOT. It has been tried in a great many cases.

The CHAIRMAN. We tried it in Iowa, with wonderful success, but the law was repealed.

Mr. PINCHOT. The total amount of timber that is produced in those ways is infinitesimal, or very small, compared with the gigantic demands of the country. That is the trouble.

The CHAIRMAN. But suppose the legislature should pass a law allowing each farmer an exemption of \$100 an acre for five years. Would not that give encouragement?

Mr. PINCHOT. Yes; I think it would—it might.

Mr. ASWELL. Could the Federal Government pass it?

The CHAIRMAN. Our State did pass it.

Mr. TINCHER. They worked that very cunningly in Iowa; they got them to plant the trees, and then repealed the law. [Laughter.]

Mr. KINCHELOE. Mr. Chairman, if it was such a great success, how did they come to repeal the law?

The CHAIRMAN. The legislature did that; I believe it a mistake, it stopped the planting of trees.

Mr. GERNERD. Mr. Pinchot, my thought with regard to the replanting of trees is this, that either the Federal Government ought to replant these trees on national forests, that is on lands acquired for that purpose, or assist in any States that have acquired large tracts of land; that in that way the Federal assistance should be given.

Mr. PINCHOT. Exactly.

Mr. GERNERD. In other words, that in proportion to the number of acres that the State acquired Federal aid ought to be given to that particular State that is engaged in this reforestation. That is very much along the same line as the Roach bill, which was passed here recently, providing that aid should be given in proportion to the number of improved highways.

Mr. PINCHOT. The distribution of it inside the State, I think, ought to be controlled by the State.

Mr. GERNERD. Would not that be of greater benefit to the future development of the timber resources of the country than to encourage planting by private individuals?

Mr. PINCHOT. I think both ought to be done.

Mr. GERNERD. Yes; but I am speaking now of giving Federal aid to the private individual.

Mr. PINCHOT. I want to make that very clear. The reforestation of privately owned land ought to be taken part in, in my judgment, by either the State or the National Government, only to the extent of furnishing free tree material.

Mr. McLAUGHLIN of Michigan. And tax exemption?

Mr. PINCHOT. And tax exemption, so far as that is valuable; although I have very largely lost faith in the remission of taxation as a method of securing new timber growth. I do not think anything except mandatory legislation will have any real effect.

Mr. McLAUGHLIN of Michigan. To me the tax feature is very important. If a man has timber on his land, very likely during his lifetime he will get nothing out of it, and every year as the land is improved it is subject to a higher taxation. It seems to me that would discourage the private individual from growing anything.

Mr. PINCHOT. I do not want you to misunderstand me. I believe it is a good thing to do, but I do not believe it will bear any very important part in the solution of the general problems. I think we ought to try it and give it every chance, but it has been tried a great many times and it has never produced any really important results.

The CHAIRMAN. If it would result in growing as much as one acre more on each of the 6,000,000 farms it would be a good thing?

Mr. PINCHOT. It would be a good thing.

The CHAIRMAN. And it would place the lumber close to the door of the consumer.

Mr. PINCHOT. It would be a good thing, but by itself it is not the solution, in my judgment.

Mr. KINCHELOE. Is it not your judgment that in comparison with the importance of the rehabilitation of these forests on the lands owned by the Government and by the States, the perpetuation of them on private lands is a mere bagatelle?

Mr. PINCHOT. The big thing with the privately owned timber lands, and the only really effective thing in my judgment, will be mandatory legislation.

Mr. KINCHELOE. You say you think a 5-cent tax would make the administration of that law self-sustaining. Would it take a swarm of Federal Government officers to go around all over the country to see that it is enforced?

Mr. PINCHOT. No. In the first place, the Capper bill specifically eliminates all the farm wood lots. In the second place, they have already a competent administration in the United States Forest Service, with branches in the timbered regions where most of the work would be done, which are perfectly capable of doing the work.

Mr. KINCHELOE. You do not think it would be necessary to increase the force?

Mr. PINCHOT. Possibly it might be necessary to increase the force somewhat, but not, in my judgment, beyond the production of the tax.

Mr. McLAUGHLIN of Michigan. Generally speaking, as far as your knowledge extends, lands that have been in forest will reseed themselves?

Mr. PINCHOT. Generally speaking, if you keep the fire out.

Mr. McLAUGHLIN of Michigan. Of course, you are assuming that fire protection is absolutely necessary?

Mr. PINCHOT. Yes.

Mr. McLAUGHLIN of Michigan. With every burning over the virtue of the soil is destroyed and the lands become worthless?

Mr. PINCHOT. The lands become worthless. You must remember, of course, that that differs very much in different parts of the country. Forest reproduction in a semiarid region is vastly more difficult than in a wet region.

Mr. McLAUGHLIN of Michigan. In great areas in the State of Michigan where the pine was removed oak came up. In many places very little pine springs up. Do you find that in other parts of the country?

Mr. PINCHOT. Yes; it is very common.

Mr. McLAUGHLIN of Michigan. That some other kind of timber comes up?

Mr. PINCHOT. Yes.

Mr. McLAUGHLIN of Michigan. There is another matter I want to ask you about. We are speaking of buying lands for reforestation, and the general expression is that lands should be acquired that are not suitable for agriculture but are suitable for forests. As far as my personal knowledge extends, the hardwoods, which are essential—we must have that kind of timber in large quantities—grow on heavy lands that are altogether suitable for agriculture. Generally speaking, in the State of Michigan the lighter woods—pine, hemlock, and so on—grew on the lighter lands, not so good for agriculture, although some of it is very good; and, almost without exception, the heavier woods grew on good heavy land, very good, indeed, for agriculture.

Now, it would be necessary for us to supply the hardwoods the same as the softwoods if we are going to reestablish the timber supply; and it will be necessary for us to acquire a lot of those former hardwood lands at very high prices, and we would not be able entirely to follow the policy that lands not suitable at all for agriculture should be taken. Would not that be true?

Mr. PINCHOT. That is true. There would be places where it would be desirable to raise timber on land that could be farmed. But the general principle I think holds.

Mr. McLAUGHLIN of Michigan. The acquiring of that land would take a very great deal of money, would it not?

Mr. PINCHOT. I do not think the acquisition of all the land that is necessary is the solution, Mr. McLaughlin. I think that the solution is to require the timber-land owner to keep his land productive. I do not think the Government can buy all the land that is needed to produce the timber that the people of this country have got to have.

Mr. McLAUGHLIN of Michigan. Would you then require the man who owned hardwood land, which land is highly productive from an agricultural standpoint after the timber is removed, to keep his land producing timber?

Mr. PINCHOT. I would say, just as I said a moment ago, that there would be occasional cases where the poorer quality of agricultural land ought to be kept in trees.

Mr. McLAUGHLIN of Michigan. Of course, in a mountainous country or very rough country not suitable for agriculture, where the hardwood timber grew, land might be acquired at a small price, or it might be reasonable to require the owner to continue the forestry policy; but where other lands are desired it would be a hardship on the owner to compel him to keep on reforesting, and if the Government could acquire them, it would cost a great deal of money. You could not acquire that land at anything like the price at which land has been acquired in the mountainous country.

Mr. PINCHOT. The great bulk of the hardwood lumber would necessarily be raised in the mountains on land of nonagricultural character. It is true that all the way from Pennsylvania south to Georgia there are very large areas of land which grow nothing much but hardwood which are unavailable for agriculture. In this whole matter you have got to grow the different kinds of timber where they can best be grown and with the least interference with other improvements, such as agriculture. And the reason why we will never get in

Iowa or Kansas large enough supplies of timber for the use of the people there is that the land is too valuable to be put to earning 2 or 3 or 4 per cent under forest.

Mr. McLAUGHLIN of Michigan. You have an intimate knowledge of the national forests. Are there not still large areas within the boundaries of the national forests on which reforestation is not carried on extensively?

Mr. PINCHOT. There are.

Mr. McLAUGHLIN of Michigan. Very large areas in the aggregate?

Mr. PINCHOT. Yes, sir.

Mr. McLAUGHLIN of Michigan. I made that statement yesterday. I thought I was right in making it, but the gentleman who had the floor at the time differed with me. He said there was very, very little area within the national forests that could be used for replanting.

Mr. PINCHOT. That is not my experience. I have seen a great deal of land in the national forests that could be used for replanting. It may be that the larger part of that land has been cut out since I ceased to be Government forester, but in my day there were very large areas which required reforestation. Col. Greeley would be able to answer that question better than I can.

Mr. McLAUGHLIN of Michigan. What do you think of the idea that has been advanced, so the newspapers say, by a gentleman very high in the councils of the Nation at the present time, that all the national forests should be turned over to the Interior Department? [Laughter.]

Mr. PINCHOT. What I think about that, Mr. McLaughlin, is not fit to print. [Laughter.]

Mr. McLAUGHLIN of Michigan. Do you think it would be a better forest policy to have it under the Interior Department than under the Department of Agriculture?

Mr. PINCHOT. I do not. I would like to testify on that subject very much; that is close to my heart.

Mr. TINCER. We will give you a chance. I have a bill here to take a few things away from the Department of the Interior and the Department of Commerce and transfer them to the Department of Agriculture. We will call you as a witness.

Mr. PINCHOT. I wish you would. I would like to say that is a sound bill; I have read it.

Mr. GERNERD. The other day I heard it stated that about 20,000,000 acres a year are devastated by forest fires. Am I correct, Col. Greeley?

Mr. GREELEY. About eight to ten million acres a year.

Mr. GERNERD. Are devastated by forest fires?

Mr. GREELEY. Yes.

Mr. GERNERD. What did you say it would cost to prevent those fires?

Mr. GREELEY. I said that sufficient fire protection for the whole country could probably be brought about for eight or nine million dollars a year—the total expenditure from all sources, National, State, and private.

Mr. GERNERD. I just wanted to refresh my memory on that subject.

Do you not think that from an insurance standpoint—I mean, from the standpoint of preserving our own rights—we ought to provide a fund sufficient to stamp out so far as practicable all forest fires?

Mr. PINCHOT. I think we ought to expend steadily increasing amounts for suppressing forest fires, until we can get a public sentiment created all over the Nation that will itself pretty well take care of the matter. Forest-fire protection is not only a matter of spending money; it is a matter of getting the people to think right about it.

Mr. GERNERD. I know about that; I have that right in my own country, and I find the most effective fellows are the game wardens and the fellows that are interested in game. They are the ones that are helping to fight the forest fires in our State.

Mr. KINCHELOE. Would not the mountain regions of Virginia, West Virginia, Kentucky, Tennessee, and North Carolina be a great field for the rehabilitation of the hardwood forests?

Mr. PINCHOT. Yes.

Mr. KINCHELOE. Those mountains are really very fertile?

Mr. PINCHOT. Yes; but yet not suitable for agriculture.

Mr. Chairman, may I say a word about the matter of the proposed transfer of the national forests?

The CHAIRMAN. Why, certainly.

Mr. PINCHOT. I would like to say, Mr. Chairman, that there is absolutely not a single, sound reason of any sort for this proposed transfer. The proposition is based on a complete misunderstanding of what the object of the national forests is, and nothing but evil could come out of it. I am speaking now not merely as a man interested in national forestry, but as a man interested in State forestry. The State Forest Commission of Pennsylvania passed very strong resolutions against this proposed transfer, because we are interested in having the national forest work go on in a vigorous and intelligent way. The Interior Department knows nothing about forestry and has not the proper mental attitude to deal with forest questions.

The CHAIRMAN. The proposition is not given very serious consideration by anybody, is it?

Mr. PINCHOT. It was given very serious consideration, I understand, Mr. Chairman. And while I do not want to take up your time—

The CHAIRMAN. I have understood that it was considered rather as a joke.

Mr. PINCHOT. If that is true I am delighted, but there has been no proposition come up for a good while that was so thoroughly dangerous to the progress of forestry in the United States as this proposed transfer. The Interior Department, as I have said, is a real estate agent, and this amounts to the proposition of letting a real estate agent run the farm.

Mr. ASWELL. Was that recommendation made by Brig. Gen. Sawyer?

Mr. PINCHOT. No; it was made by Secretary Fall.

The CHAIRMAN. Do you mean to say that the public lands should be transferred to the Forest Service, under the Department of Agriculture?

Mr. PINCHOT. Should be transferred to the Department of Agriculture?

The CHAIRMAN. Yes; the Forest Service in the Department of Agriculture.

Mr. PINCHOT. The control of the public lands is, of course, an agricultural matter and should be in the Department of Agriculture.

Mr. TINCHER. What do you say about transferring the other public lands to the Department of Agriculture?

Mr. PINCHOT. The public-land question is an agricultural question mainly; it is a question of the use of land for production.

Mr. TINCHER. Some newspaper article that I read stated that they were going to transfer the national forest to the Department of the Interior, or that there was talk of that, and also that they were going to take some work away from the Department of Agriculture, such as the Bureau of Markets, etc. I am firmly of the opinion, whether it is meant as a joke or not, that H. R. 9599 or something of that nature should be passed.

Mr. JACOWAY. What is that bill?

Mr. TINCHER. That is my bill [Reading:]

"That in addition to the authority heretofore given to administer the activities of the Department of Agriculture, the Secretary of the Department of Agriculture shall, from and after July 1, 1922, execute or cause to be executed all laws, parts of laws, powers, duties, or functions affecting the public lands or reservations under the control or supervision of the United States now vested in the Secretary of the Interior, the Commissioner of the General Land Office, the Director of the National Parks, the Director of the Reclamation Service, and the Commissioner of Indian Affairs; and on and after July 1, 1922, the Secretary of Agriculture shall execute or cause to be executed all laws, parts of laws, powers, duties, or functions affecting the work of the Bureau of Fisheries and the Commissioner of Fish and Fisheries now in the Department of Commerce."

Don't you think those are subjects that properly come under the Department of Agriculture?

Mr. PINCHOT. I do.

Mr. TINCHER (reading): "All rules and regulations made, contracts entered into, or permits issued under authority of any of said laws shall remain in force and effect until revoked, modified, or amended by the Secretary of Agriculture. But it is not intended by this act to grant to the Secretary any greater authority than was vested in any department, office, service, or bureau hereby transferred."

Then, there is another little feature of the bill that I think should be treated seriously; it may not be such a joke. I rather think this will be a law before the 1st day of July, 1922. [Reading:]

"That there is hereby transferred to the Department of Agriculture the custody, control, and administration of all public lands and reservations, including the national parks, national monuments, abandoned military reservations, lands

withdrawn for reclamation purposes, Indian reservations, fishing stations, together with any and all files and other records and all property, both expendable and nonexpendable, purchased for or used in the administration of the work of the department, office, bureau, or service hereinbefore mentioned."

Mr. McLAUGHLIN of Michigan. Do you include fish?

Mr. TINCHER. Yes. Is there any other department of this Government that can consistently claim that the administration of those laws should come under it?

Mr. PINCHOT. My judgment is, Judge Tinchler, that your bill is absolutely sound. Every one of those questions is an agricultural question, or a food question. In reply to Mr. McLaughlin, I would like to say that the Department of Agriculture is already handling the game questions that the Federal Government has to deal with, and it is perfectly right that fish should be included.

Mr. TINCHER. I do not bring up that bill at this time for a hearing. The question of this transfer came in; and as I have some very pronounced views on the transfer question and had introduced this bill, I simply wanted my colleagues on the committee to know that I am serious in thinking that that would be an economical and proper transfer in the reorganization plan now contemplated. I want to hear you on the bill at the very first opportunity.

The CHAIRMAN. The policy advocated here seems to be to encourage the growth or regrowth of timber in the forests remote from the people in the farming centers of this country. I have been trying to find out if we could not give a little encouragement to the people in the Middle West by bringing the lumber a little closer to their doors. If Congress is going to take hold of it, and if Congress is going to distribute large sums of money, I would like to know if we are likely to get any benefit out of it.

Mr. GERNERD. About as much as you have been getting out of the Roush bill.

The CHAIRMAN. We will be permitted to pay part of the taxes, of course.

Mr. McLAUGHLIN of Michigan. Mr. Pinchot just explained that the State of Pennsylvania is more interested in the timber in the State of Washington than the State of Washington itself is. Why is not that true as to Iowa? If we are going to scrap for money in each separate State, we will never get anywhere.

The CHAIRMAN. But the growing of the timber in the East or in the West does not benefit Iowa, so far as the price of lumber is concerned. With the prevailing high cost of transportation it is clear that the producer and the consumer will have to get a little closer together.

Now, we do not expect to grow timber on a large scale in Iowa, but there are timberlands in Minnesota and Wisconsin, and as I gather it very little attention is to be given to the central part of the country; practically all of the appropriation is to be expended on the eastern and western coasts. In Iowa we are interested in getting the lumber as cheaply as possible. What encouragement have we? What can we expect?

Mr. PINCHOT. I will say this, Mr. Chairman: I would be very strongly in favor of encouraging timber growing in Iowa, in Michigan, and in any other place up to the point where it is a practical proposition and we get out of it a reasonable return for the money that goes in, but I realize, and I think you do, that it will be impossible for Iowa ever to become self-supporting in timber; that she must always draw the timber from somewhere else; and that the timber ought to be grown where it can be grown most cheaply. If it can be grown more cheaply under the heavy rainfalls of the Puget Sound region, for instance, than it can be grown in Iowa or in Nevada, it should be grown there; but the whole Nation, so far as its land is more valuable for timber growing than for any other purpose, ought to have that land put to that purpose; and with the best we can possibly do we are going to be short anyhow.

The CHAIRMAN. It is not necessary to grow all the lumber in Iowa; grow it in Minnesota, Michigan, and Wisconsin. If so, that brings it that much closer to us. What can we expect? What is your idea about Michigan, Minnesota, and Wisconsin and the Central States? What can be done?

Mr. PINCHOT. In the first place, forest devastation ought to be stopped; that is, the extension of this man-made desert ought to be put an end to by the passage of mandatory legislation, as I have said a dozen times. In the second place, money ought to be appropriated by the Federal Government to encourage its States to stop forest fires, to plant more trees, and, so far as it may be wise, buy more national forests in those States.

The CHAIRMAN. In your opinion, then, mandatory legislation is absolutely necessary?

Mr. PINCHOT. It is absolutely indispensable.

Mr. TEN EYCK. But you do not believe in carrying that so far as to control the wood lots on the farms?

Mr. PINCHOT. Absolutely not; only commercially owned timberlands.

Mr. JACOWAY. This has been suggested. You can take the lumber from the Oregon forests, put it on ships, and go down the Pacific coast, through the Panama Canal, and up to New York, and then reship it to Chicago, and by that means of cheap water transportation Chicago can compete with any of the mills within a radius of 300 or 400 miles.

Mr. PINCHOT. I am not familiar with prices at all.

Mr. JACOWAY. I say, I have heard that is true. Do you know whether or not it is?

Mr. PINCHOT. I do not. But I do know that the anthracite mines in Pennsylvania are already using Oregon timber.

Mr. ASWELL. I am not quite clear on one point. Do you believe that there should be mandatory legislation on the question of reforestation specifically?

Mr. PINCHOT. I believe that it should be made mandatory upon the private owners of commercial timberlands to keep those lands growing trees when they are not more valuable for agriculture.

Mr. ASWELL. Well, those that have already been cut—do you believe in mandatory legislation for the reforestation of the lands that have already been cut—in Pennsylvania, for example?

Mr. PINCHOT. No; I do not think that is an essential thing, except in this interpretation. After a while there will come legislation putting upon the owner of timberlands the responsibility for keeping fire out, or for fighting it properly, but those will be State laws.

Mr. ASWELL. As I understand you, you are in favor of mandatory legislation affecting those States that have standing timber, but not in favor of mandatory legislation affecting those cut-over lands at the present time?

Mr. PINCHOT. That is exactly it.

Mr. ASWELL. Then you would take the States that have timber and throttle them and make them continue as timberlands, regardless of their agricultural character?

Mr. PINCHOT. Oh, not at all. I would be very careful to see that only those lands more suitable for growing timber than for any other purpose were kept growing timber.

Let me give you an illustration. Pennsylvania has got the only anthracite coal in the country. A few years ago, when there was a threat to close down the Pennsylvania mines, it was not the State of Pennsylvania that took hold of that matter; it was the National Government, because it was realized at once that the supply of anthracite coal, although it all came out of one State, was a national matter and could only be handled by the National Government. So I think this timber matter is a national matter.

Mr. CLARKE. Is there not an anthracite deposit in Arkansas?

Mr. PINCHOT. I never heard of it; perhaps there is.

Mr. JACOWAY. There is a fine one, within 4 miles of my town.

Mr. PINCHOT. Perhaps I can escape by saying it was not known in 1902.

Mr. CLARKE. Oh, I can tell you it was known in 1902.

Mr. KINCHELOE. If I understand your position, Mr. Pinchot, you are not in favor of the Snell bill, because of the impracticability of it, as you have illustrated it?

Mr. PINCHOT. I do not believe in sections 1 and 2 of the Snell bill.

Mr. CLARKE. You do not believe you can get the necessary cooperation? Is that the idea?

Mr. PINCHOT. I do not believe Congress would pass the bill, and if it did pass the bill I do not believe the States would pass their legislation. In other words, I do not think the bill would pass, and if it did, I do not think it would work.

Mr. KINCHELOE. You do not think the legislatures in the States where the timber is would pass it?

Mr. PINCHOT. I do not; no.

Mr. KINCHELOE. You say you are against sections 1 and 2. As I understood you a while ago, you do not think it is necessary, under section 3, to appropriate this \$3,000,000 for this survey either?

Mr. PINCHOT. Not before a national forest policy is enacted. I think the purpose of the proposed survey is excellent, but I think to delay enacting a national forest policy until that survey has been made is unnecessary.

Mr. JACOWAY. In the State of Arkansas and in many other States there is a forest reserve. Now, wherever you find a forest reserve in a State, that State is carrying a burden, is it not?

Mr. PINCHOT. In a sense; yes.

Mr. JACOWAY. There are no taxes that can come from that land that is in the forest reserve, and, as a result, they have fewer good roads, they have fewer churches, they have fewer schoolhouses, they have fewer home builders, and home makers, because they can not homestead it. Now, how are you going to equalize that burden that the State of Arkansas and other States are carrying so that they will get a commensurate benefit?

Mr. PINCHOT. That has already been provided for, I think, in this way—is it 25 per cent, now, of the gross receipts that the States get?

Mr. JACOWAY. Oh, that does not begin to touch it.

Mr. PINCHOT. It does not begin to touch it now, but ultimately 25 per cent of the gross receipts from that land will far exceed anything you could possibly hope to get from taxes on the same land.

Mr. JACOWAY. You are wrong there. You take this same area in the State of Arkansas where there have been homes built upon it, and you get infinitely more taxes for good roads, for education, for schools, and churches than you do in the amount of money that the Government gives you back on the forest.

Mr. PINCHOT. You do now.

Mr. JACOWAY. I say, the record is against you.

Mr. PINCHOT. There is no record, because the future has not come yet.

Mr. JACOWAY. You can only judge the future by the past in a matter of this kind. You take a million acres or half a million acres in the State of Arkansas. Those taxes now go in part to good roads, part to churches, part to schoolhouses, and so on. Then you take the same amount of land in these forest reserves, and you find scattering schoolhouses, scattering churches, impassable roads. That is a burden that the State of Arkansas is carrying, and there must be some commensurate benefit given back to those States.

Mr. PINCHOT. Let me call your attention to this, that the character of the land in the two places is not the same. The land that is in the national forest in Arkansas, if it is fitted for agriculture, ought to go, and will go, to agricultural development; it will be thrown out of the national forest.

Mr. JACOWAY. But if you do that, a man would have to set aside 40 acres here and 80 acres there, and by the time he has fenced that land he would have more in fences than the land would be worth.

Mr. PINCHOT. That would depend upon the character of the land. The fact that you have 40 acres here fit for agriculture and 80 acres there not fit for agriculture is the fault of the land; it is not the fault of the law.

Mr. JACOWAY. You can not reflect on the character of the land in Arkansas, because when I go up through New York and see them cultivating farms that are on a slope of 45 degrees—and they are doing the same thing in Pennsylvania—you would think they had to have goats to cultivate them. Compared with that, you can put under cultivation every foot of land in Arkansas.

Mr. PINCHOT. It may be you can; I do not know.

Mr. JACOWAY. And thousands of acres of that land are in the forest reserve to-day.

Mr. PINCHOT. You people in Arkansas are going to be infinitely better off because those national forests are created than if they were not. You are going to get more roads built through there eventually by the National Government. What is the appropriation now, Col. Greeley?

Mr. GREELEY. \$12,000,000 for the next two years.

Mr. PINCHOT. \$12,000,000 for roads in the national forests. You will be very glad before you are as gray as I am that you have got those national forests.

Mr. JACOWAY. How much of that are we going to get?

Mr. PINCHOT. I do not know; I am not administering the fund.

Mr. JACOWAY. There will not be enough to hold an inquest over.

Mr. PINCHOT. The history of the thing all over the world is that when land that is more valuable for growing trees than for agriculture is kept in trees; it is enormously to the benefit of the community, and you are going to have just exactly the same situation that Mr. Haugen was talking about; you are going to have your timber grown at home. The whole story of civilization—assuming that this land ought to be under forests—is to the effect that it is a mighty good thing for the people who live in the neighborhood.

Mr. JACOWAY. I hope you are right about that.

Mr. KINCHELOE. I want to get your idea further about this bill. You say you do not think that under section 3 that money ought to be appropriated until the policy is established?

Mr. PINCHOT. No. I said I did not think we ought to wait to establish a policy until after that investigation had been made.

Mr. KINCHELOE. Do you think we ought to appropriate this \$3,000,000 to make this investigation now?

Mr. PINCHOT. I think the investigation is an excellent thing.

Mr. KINCHELOE. Can we not get most of the information from the State foresters in the various States anyhow? Is not that information available?

Mr. PINCHOT. My general idea about that is that an investigation of that kind is a good thing, but not essential.

Mr. TINCHER. Mr. Chairman, before we adjourn, I have a letter here that the members of the committee have already read. It has been suggested that I put it in the record.

The CHAIRMAN. Without objection, that may be done.

(The letter referred to is here printed in full, as follows:)

NATIONAL BOARD OF FARM ORGANIZATIONS,
Washington, D. C. January 11, 1922.

Hon. J. N. TINCHER,
House Committee on Agriculture,
House of Representatives.

MY DEAR MR. TINCHER: You have been kind enough to ask for my views on the Snell bill (H. R. 129) hearings now in progress before the Committee on Agriculture. Speaking as president of the National Farmers' Union, I am opposed to this bill.

In the first place, the farm people of the United States use more than half of the wood consumed in America. For that reason their interest in such a measure as this is larger than any and all other interests put together.

In the second place, most of the farmers, which includes something like two-fifths of all our people, depend already for the lumber and wood it takes to grow the crops to feed this Nation on wood and lumber imported from outside the State in which they live. They believe, therefore, that this is not a State question, but a Nation-wide question.

In the third place, the Snell bill, as I read it, looks upon this as a State issue and not a national issue, by putting up to the legislatures of the States that still have lumber to sell the question whether the people who live in the States where lumber is scarce shall have any lumber at all.

I understand that under the Snell bill farmers' wood lots would be subject to regulation equally with large lumber tracts. This is bad, for two reasons. It would cost too much to look after 6,000,000 farms, and anyway wood lots are not being destroyed like the lumber woods. They are the safest of all woods in private ownership.

I understand that this bill is being pressed by the lumber interests. That fact in itself is not a recommendation to the people I represent. The lumber interests destroyed our forests. They are just an interest, one out of many, but the farmers are the largest part or division of our whole people.

As a representative of farmers and farm organizations in all parts of the United States, I desire to register my protest against the Snell bill as being dangerous to the farmers of America, who can not grow crops without wood. I do not see how any man who represents farmers could take any other point of view. This is a nation-wide question, and the farmers will, of course, demand that their interest be protected by handling it as such.

Very truly, yours,

C. S. BARRETT.

(Thereupon, at 12.15 o'clock p. m., a recess was taken until 1.30 o'clock p. m.)

AFTER RECESS.

The committee reassembled at 2 o'clock p. m., pursuant to recess.

The CHAIRMAN. The committee will come to order. You may proceed, Mr. Pratt.

STATEMENT OF COL. JOSEPH HYDE PRATT, DIRECTOR NORTH CAROLINA GEOLOGICAL AND ECONOMIC SURVEY, CHAPEL HILL, N. C.

Col. PRATT. Mr. Chairman and gentlemen of the committee, I want to say at the beginning that I am not a forester, but I am the director of the geological and economic survey, in which is located in North Carolina the forestry division which does have charge of forestry work, and the forester of the State is under the supervision of the director of the survey. But I am speaking largely from the executive side rather than from the forester's standpoint.

I want to preface my remarks by stating that I believe we are facing a really much bigger problem when we speak of forestry than most of us realize. We have been considering it largely from the standpoint of a future supply of timber, for the protection of the headwaters of navigable streams, but I want to go one step further and make the statement that the very life of this Nation depends upon maintaining a certain percentage of area of this country in forests; that if we should absolutely denude all the land of forests the Nation itself would begin to decay. So it is a much broader problem than we at first perhaps had even thought or considered.

In regard to the questions that have been coming up before this committee, I want to say, first, in regard to the question of finally realizing what we want for forestry, I am firmly convinced that we must have Federal or national control or, in other words, mandatory laws in regard to the devastation of our forests, and without going into any detailed discussion of sections 1 and 2, I just want to make this statement, which will answer one of the questions that was raised this morning. We have taken up and discussed in North Carolina the question of the State's regulating the cut of timber, how the slash shall be left, and the condition in which the ground shall be left. In other words, passing legislation relating to lumbering in North Carolina—and many of our lumbermen that we took this up with, were not antagonistic to the question of legislation, but they did not consider it was fair for North Carolina to pass such legislation and thus make their cost of lumbering much greater, or to a certain extent greater, than in Tennessee, for example, a competitive State, or northern Georgia, Virginia, or Kentucky; and they felt that national legislation or Federal control was absolutely necessary.

Mr. JACOWAY. Right there—you say that it is your idea that we ought to have Federal mandatory legislation?

Col. PRATT. I do, sir.

Mr. JACOWAY. In a concise way, can you state what ought to be the provisions of that law to make it mandatory? What kind of a law would you draw?

Col. PRATT. I do not think I can say it much better than that I am in accord with practically all that was said this morning in regard to the mandatory legislation which was discussed.

Mr. JACOWAY. You would adopt the testimony of Mr. Pinchot, then, as your testimony?

Col. PRATT. Almost entirely; yes, sir. I want to take up, however, particularly, the cooperative work of the Forest Service, such as is mentioned in sections 3, 4, 5, and 6, and the balance of the bill that has been under consideration here.

While North Carolina is not making and has not made large appropriations for forestry work, it has tried in every way to cooperate with the Forest Service. In regard to the prevention of forest fires under the Weeks law, North Carolina is one of the cooperating States. I might state right here that North Carolina is one of the 15 States that are exporting lumber, and I might as well bring right in here that our imports of lumber and our exports of lumber are coming pretty near to equalizing each other, so it is not going to be long before North Carolina may not be one of the exporting States unless certain conditions are changed in the State.

Taking up the sections of the bill, I would like to mention first section 3, in regard to the question that has been discussed considerably—the survey or inventory of the timber resources of the country. North Carolina through its forest division has been making a timber inventory or survey of the State, and the question was asked could the State forester or the forestry division furnish to the forester of the Forest Service information in regard to such a survey? I will state they could do it if the State had made such a survey. North Carolina has been working for eight years on that survey, and has

thus far completed 57 of the 100 counties. Now, the reason we have not progressed any faster is because we have not had the money necessary to make such a survey, so we are slowly accumulating that knowledge.

While I believe that such a survey is of value and is necessary in the end in connection with the forestry work, it is not necessary at the beginning in shaping a Federal policy, but I believe as we begin to work out the details that such a survey is valuable and should be made. In North Carolina such a survey has been of value in enabling the State in going before our State legislature to present the matter more in detail, and while the figures are not accurate they are worth more than a guess. We have been able to give information and answer the questions of the committee in our State legislature in regard to the timber resources better than we could have done without the survey. It has been of value to us in shaping our policy of work in North Carolina.

The CHAIRMAN. Tell us about the expenditures you are making in your survey?

Col. PRATT. The survey we have been making in our State, I say, is not accurate, but it does give us information of value. It has cost us approximately \$400 per county, and in the end it will cost us between \$40,000 and \$50,000 to make that survey.

The CHAIRMAN. And what is the number of acres in each county? Have you estimated it by acres?

Col. PRATT. We have got in the State approximately 51,000,000 acres, of which we estimate between 19,000,000 and 20,000,000 acres are forest land.

The CHAIRMAN. Can you give us an estimate of the cost per acre or per thousand feet?

Col. PRATT. The counties will vary from probably 130,000 to about 300,000 acres—that is, the total area of the counties.

The CHAIRMAN. How complete is your survey in these 57 counties? Is it quite accurate?

Col. PRATT. No; I do not pretend it is an accurate survey.

The CHAIRMAN. I was trying to estimate the cost of the whole system.

Col. PRATT. But I state that the figures we were able to get are not accurate. Perhaps the best way to illustrate that is this: We have estimated that we have 34,000,000,000 feet of timber in North Carolina. Now, we may be anywhere from three to five billion feet out of the way, but I do not think it is as great as that.

The CHAIRMAN. How were those figures ascertained, by cruises?

Col. PRATT. We put two men in a county. They will stay from 10 days to 2 weeks or a month, according to the size of the county. They will ride and drive and walk through the different forested areas and estimate on perhaps certain small areas more accurately than they do on others.

The CHAIRMAN. How are the estimates made, by counting the trees, by cruising, or how?

Col. PRATT. I will ask Mr. Holmes if he will give it exactly, as he did part of that work.

Mr. HOLMES. Mr. Chairman, it was made largely by ocular estimate and from consulting landowners and lumbermen who had been operating in the county; not by actual measurements by the man investigating.

The CHAIRMAN. You did not proceed as in the Forest Service, then, to measure or to count the trees in a certain area?

Mr. HOLMES. No, sir.

The CHAIRMAN. And estimate the balance.

Mr. HOLMES. In the State work?

The CHAIRMAN. Yes.

Mr. HOLMES. It was done by foresters, but they investigated and also inquired. They walked through certain areas, but largely they drove and rode along where there were roads and trails. But they made their own ocular estimates and then balanced it by information from those who were familiar with the conditions in that county.

The CHAIRMAN. But no actual cruising was done?

Mr. HOLMES. Some actual cruising was done; yes.

Col. PRATT. Some, but not a great deal. But what I was trying to bring out, Mr. Chairman, was that even that type of survey has been of value in enabling us to give to our State legislature information that was more than simply a guess as to whether we had 20,000,000,000 or 50,000,000,000 or 100,000,000,000 feet.

The CHAIRMAN. Well, it is a fairly accurate estimate?

Col. PRATT. It is a fairly accurate estimate, and was well worth while. I am trying to bring out that I do believe that such a survey as is recommended in section 3 is worth while and is valuable and is needed.

In regard to forest fire protection cooperation, that has been of inestimable value to us in North Carolina. We have been cooperating under the Weeks law to a limited extent, I think, ever since the Weeks law was passed, and this year we got more cooperation than we ever had before.

One phase of our cooperation which I think may be of interest to this committee—and it is right in line with the acquisition of national forests—in working out our areas we are this year trying to include within the State boundary of protected land all of the 340,000 acres that are in the National forests, so that we in the State work have on one side of our area the protected boundary of the national forests, and they in turn get a State boundary as one of their boundaries of protected area, making it a mutually cooperative way of protecting, for we haven't money enough to try to protect the whole State.

We have gone one step further. Our counties are cooperating with us in the forest fire work and are making appropriations to the State department with which to prevent forest fires within their respective counties.

Mr. JACOWAY. Is that done by the county authorities?

Col. PRATT. That is done by the county commissioners. We have a law in North Carolina authorizing any county in the State that desires, through its governing board, which is the county commissioners, to appropriate such sums as they may deem necessary to cooperate with the State in the protection of their forests from fire. Any county in the State can cooperate with the State geological and economic survey in the protection of its forests from fire.

There are several lumber companies that are cooperating also with the county and the State in the protection of their forests from fire. As our appropriation is limited we could not cover the whole State, so we first picked out areas for protection that we considered most needed it, and those are in the western part of the State.

In regard to the question of reforestation I would like to say just a word or two. In North Carolina if we can prevent forest fires or keep down forest fires we have little or no trouble in reforestation. Our forests will naturally reforest themselves. Even our cut-over lands will come back if we will keep out the forest fires. North Carolina is so situated in connection with its cut-over lands and its forests that we will have to do but very little actual planting to bring back the greater portion of the area into forests, and the main thing is to keep out the forest fire.

The other section that I want to take up briefly is that in regard to the appropriation for the experimental stations, such as have been established in the last few years. There is one that has recently been established in the southern Appalachian region. I believe those stations of the Forest Service are doing a splendid work and a great deal of good in working out the problems in connection with the utilization of wood, the problems in connection with the growth of the various timber trees in the forest.

The CHAIRMAN. Do they study the utilization of the wood there also?

Col. PRATT. No; not at our station. The one at Madison, Wis., does. That is the only one that I know of that does that. But that is one of the permanent stations.

The CHAIRMAN. It is not suggested now to build stations like the one we have at Madison anywhere?

Col. PRATT. No, sir; like the one you have at Asheville, the southern Appalachian station, and the one you have at New Orleans, in the extreme southern field.

The CHAIRMAN. That is for the growing of trees.

Col. PRATT. Yes; that is for the growing of trees. I mentioned wood utilization for that is one phase of the work of the Madison, Wis., station.

In regard to the nurseries and seed trees, I am very much in favor of cooperation, but I think there again it may come in with the State and Federal Government in providing seed trees or trees for reforestation, although North Carolina itself, as a State, does not need a great deal of such assistance.

In closing I want to mention just briefly the question of the acquisition of additional lands for national forests. I stated that in North Carolina the Government has taken over approximately 340,000 acres. We would like to see the Government take over, if they thought best, 1,000,000 acres.

Mr. McLAUGHLIN of Michigan. You mean 340,000 acres.

Col. PRATT. Yes; 340,000. I would like to see them take over 1,000,000 acres of the land that has been and is under consideration in North Carolina. We feel that it is a big asset to the State, the Government taking over those lands in national forests; that it is protecting in a way that the State could not do now and might not be able to do for years to come, the navigable streams of the whole southern Appalachian region; that it is perpetuating the forested area of the southern Appalachian region, and that in the end North Carolina will derive a benefit from those national forests that exceeds what we may be losing at the present time in regard to taxes that might be derived if those lands were in private ownership.

Mr. McLAUGHLIN of Michigan. I would like to know a little more of what is being done at the experiment stations in your State. You said that in a general way you approved section 4. Section 4 provides for conducting experiments, investigations, and tests in the chemical, physical and mechanical properties and utilization of native and foreign woods, tests of wood preservation and all that kind of thing.

Col. PRATT. I will state that the appropriation for the station at Asheville, in the southern Appalachian region, was \$15,000; that we have requested and have petitioned through our Senators and Congressmen from North Carolina, and are taking it up through others, asking to have that increased to \$45,000 for that experimental station, because we believe what was accomplished by the \$15,000 has been of such value to that southern Appalachian region, and the problems that they need to consider and take up makes the expenditure of \$45,000 well worth while for that experiment station. Now, in regard to the exact nature of those studies and investigations I am going to ask the privilege of requesting Mr. Holmes, our State forester, or one of our forest men, to answer that in detail for you. We have been cooperating in those investigations, such as those in regard to white cedar, juniper, and other woods, and I would like to call upon either Mr. Holmes or one of our forestry men to answer that for you.

Mr. McLAUGHLIN of Michigan. The section is so broad that it would permit any kind of investigation in experimental tests and all that; everything that they are doing in Madison or even more. You would not ask for the establishment of various and numerous stations of that kind, would you?

Col. PRATT. No, sir; I would not.

Mr. McLAUGHLIN of Michigan. That is what this section 4 provides for.

Col. PRATT. Well, that was not my interpretation of it. My interpretation of that was the extension of the experiment stations, such as we are extending at the present time, like the one down in the southern Appalachians. I do not know whether the act would permit the establishing in connection with that southern Appalachian station a plant similar to what you have at Madison, Wis.

Mr. ASWELL. If it is good in North Carolina would it not be good all over the country?

Col. PRATT. But I do not think you need it all over the country, because you can do a great deal of work at one station and not duplicate, because I think there are so many problems for stations similar to the one established at Asheville and in Louisiana that it is not necessary to do all kinds of work at the different experimental stations, but I do think there is a need for an extension of the work of the experimental stations.

Mr. JACOWAY. What do they do at those stations?

Col. PRATT. I will have to ask Mr. Holmes to answer that question.

Mr. JACOWAY. I thought maybe you knew.

Col. PRATT. No; I am not a forester.

The CHAIRMAN. Are you through now with your statement?

Col. PRATT. Yes, sir.

The CHAIRMAN. We thank you very much.

We will hear Col. Graves. Kindly state your name and present position, Colonel.

STATEMENT OF MR. HENRY S. GRAVES, CONSULTING FORESTER, WASHINGTON, D. C.

Mr. GRAVES. My name is Henry S. Graves. I am at the present time a consulting forester in Washington.

Mr. KINCHELOE. In the State of Washington?

Mr. GRAVES. No; Washington, D. C. I was formerly Chief Forester of the Forest Service.

Mr. McLAUGHLIN of Michigan. When did you take up that office? When did you become Chief Forester?

Mr. GRAVES. In 1910.

Mr. McLAUGHLIN of Michigan. You were the Forester, then, at the time of the passage of the Weeks Act?

Mr. GRAVES. Yes, sir. Mr. Chairman, I have not been able to attend these hearings and to hear the testimony, but I assume that you have had presented to you full information regarding the problem of forestry in its larger aspects and the magnitude of the interests involved. Doubtless you have been informed that from the standpoint of the public interests involved in the perpetuation of our forests and from the standpoint of the character of the forestry problem it is essential that there be a public participation in working it out. The measure of that public participation and the manner of it constitutes the principal question that has caused controversy and which has to be considered in working out a broad national policy.

The accomplishments in forestry which we already have secured so far have been largely the result of public effort. That is very proper, because the public must first of all provide for the right handling of the forest properties which it owns, setting an example for other owners; and the public has the responsibility to take such action as is essential to remove some of the obstacles in the way of the practice of forestry on private lands. Private owners in many places have cooperated with the Government and the States in these public efforts; in some places they have not lent such cooperation, and forestry has been to that extent retarded.

You have now been told that the public should go a great deal further and should embark on a broad policy which will really reach some phases of the forest problem which we have hardly touched and which will make the entire undertaking more effective all along the line. Some of the features of public effort which are being advocated are primarily for public purposes, quite regardless of their relation to private forests. Some of these are included in the measure before you. I refer, for example, to the extension of the national forests to include areas that are now in the public domain, and the extension through purchase. I refer also to such measures as would increase the efficiency of the national forest work, assistance to the States in their public work, etc. Some of the measures which are advocated primarily for public effort will incidentally have a very great bearing on the question of private forestry. Thus the public forests will have a large influence on the encouragement of private forestry in their vicinity, through their being centers of cooperation in fire protection, through demonstrations of methods of forestry, and in other ways.

We propose to go still further and to work out some method by which our private forests can be better handled, will be perpetuated, and will in the long run render the service to the public which is essential. This problem of forestry can not be passed up entirely to the public. Even if we have a very ambitious program of public forests we still have to rely very largely on private forests for our timber supply and for other service of the forest.

I presume that to-day not over 5 per cent of the lumber on the market comes from the public forests. The rest comes from private forests. As time goes on that ratio will change, but there always will be a considerable part of the wood material used by our country derived from the forests on private lands.

While there is a good deal of difference of opinion as to the exact steps which should be taken to bring about a better practice of forestry on private lands, I believe that all are agreed that it is going to require a broad and liberal policy on the part of the public to work out any comprehensive and practical program.

Mr. TINCER. That is a broad and liberal and comprehensive statement, but here is a committee that is confronted with the duty of reporting out legislation and here are the owners of private forests advocating paternalism in a sugar-coated form, and here is every one that is interested in forestry and every one that we know are devoting their lives to the study of the subject advocating public control. If we are going to report out legislation had we not just as well do what we think will solve the situation, and not monkey with it by piecemeal? What is your view about comparing the milk-and-water proposition of voluntary cooperation on the part of the timber States with the Government, and having a paternalism in that way, or taking over the thing as advocated by one of the measures and having the regulations go out from Washington?

Mr. GRAVES. I was going to come to that in a moment. If I can develop my statement, I think it will answer your question.

Mr. TINCER. All right.

Mr. GRAVES. I wanted to make the statement at the beginning that any comprehensive program will involve a large amount of public money on the part of the Federal Government and the States. I believe such public expenditures are necessary and that they are justified by the magnitude of the interests involved. But the public, in my opinion, is not going to appropriate those moneys unless the people have a clear understanding of the reasons why the appropriations are essential, an understanding of what public returns are expected, and a definite assurance that the actual results will be accomplished in practice.

To pass more directly than I had anticipated to the point that Mr. Tincer brought up: I do not think the bill that you have before you gives definite assurance of results. This, like other measures, calls for a large program and large expenditures of public money. If this plan or any other plan is to be adopted and if it is to have the backing of the country sufficient to warrant the expenditure of large funds from the Public Treasury, the public must have the assurance that forestry is going to be applied on private lands to the extent necessary fully to safeguard the public interests. It is for that reason that in my opinion there should be injected into the measure an entirely different viewpoint regarding the requirements upon the private owner from that which appears in the language of the bill.

I have approached this question of a national forestry policy, which includes the private forest problem, from a somewhat different angle from Mr. Pinchot. I have approached it from the viewpoint of utilizing our machinery already in existence in a good many of our States, and using State authority for introducing a sound system of taxation and similar measures, and using the State's police power to impose such requirements upon private owners as may be necessary to carry out an effective program.

The plans that I worked out while I was in charge of the Forest Service are similar in their general framework to the bill before you. The first two sections of the bill which relate to the private lands do not, however, give the assurance of the practice of forestry which would justify the large expenditures called for, or enable one to give assurance to the public that the results aimed at by this measure will be secured.

Mr. ASWELL. What does the bill require the private owners to do?

Mr. GRAVES. The requirements, of course, differ under different conditions, but the point is that under the legislation as here proposed there would be a great many owners who would not adopt the methods which are essential for adequate protection and perpetuation of the forest. My idea is that all owners should be brought under the same system, and that that should be accomplished through State authority.

Mr. ASWELL. Compel them to do it through the State authority?

Mr. GRAVES. Through the State authority, by such requirements as may be necessary. Of course, they should be practical requirements; of course, they should be adapted to the economic conditions; of course, they should not be impracticable. But they should be effective. These are details which can be readily worked out in practice.

Mr. ASWELL. You would trust the State to do it, though?

Mr. GRAVES. There should be regulations—

Mr. TINCER (interposing). Speaking about trusting the State to do it—

Mr. ASWELL (interposing). Let him state whether he would trust the States to enforce regulations on private individuals rather than the Federal Government.

Mr. GRAVES. If we use the basis of this bill and if we substitute for the general, rather vague language in the first two sections, a really mandatory provision, the States which fail to put into effect such provisions would also fail to receive the cooperation of the Government.

Mr. ASWELL. It would not get any money?

Mr. GRAVES. It would not get any money. That is the only hold the Federal Government has, the only club, if you please, to bring the States to impose such regulations as would be feasible.

Mr. TINCER. Then let me understand you. Under the plan there proposed we would hire with public money the exporting lumber States of this Nation to come into our fold and be regulated by our law and comply with our regulations. That is the only way that I can understand that we could put that into effect; that is, we would have to make the financial inducement to those States,

and to the timber owners of those States, of such a nature that they would come in or they would stay out.

Mr. GRAVES. It would be in the nature of a subsidy to the States, and from one angle you might say it is, as you express it. I think, however, that a good many of the States are in a position, or will be very soon, to introduce such measures, and that it would not take long, if some of them came in, to bring in others. The very example of those States would carry a weight which would bring in others, precisely as the regulations already adopted for fire protection by some States have had the result of quickly bringing in other States.

Mr. TINCHER. Well, if it is a good thing, why monkey with it that way? Why fool with it? Why not pass a law—we have one way; the national Congress has a way—we can pass a law and enforce it through the taxing system and have it over with—have the agony over with. Why not say to them, "We are going to handle this matter this way. You want to be regulated; we will regulate you right." [Laughter.] This is a great public question. We have decided it now. We have had the benefit of the experience of all the men that have been connected with the Forestry Department of this Government in any capacity, and really there is not much difference between you gentlemen, if I understand you, and I think I do. You all agree that this is an important public question that has got to be—we have got to have legislation on it to compel, for the benefit of all mankind, and you all agree what these regulations practically should be. You all agree upon how the national forests should be handled. Some have thought that there ought to be a little different regulations, but in the main you are together on that. Now, why fool around about whether some State will come in or not? If we are going to pass a law, let us pass one. I understand there is such a bill pending in the Senate to approach it from the taxing angle and regulate the industry in that way.

Mr. THOMPSON. That is the Capper bill you refer to?

Mr. TINCHER. Yes.

Mr. KINCHELOE. And the testimony here further shows that in the exporting States is the place where there is less sentiment for the preservation of the forests of the country than in any other place.

Mr. ASWELL. I do not agree with you on that.

Mr. THOMPSON. I disagree with you.

Mr. KINCHELOE. The gentleman from California testified that there had been no reforestation there; that they had lobbied with the California Legislature and had tried to get appropriations for forest purposes, for the protection of forests, from fires, and what they got compared with what they spent out there was a mere bagatelle from the legislature, and he said that those people who lived in those exporting States where they were in constant contact with that timber were under the impression that it was inexhaustible and there was not sentiment at all for its preservation.

Mr. ASWELL. That might be true in California but I know one State where it is not true.

Mr. KINCHELOE. I am talking about the evidence before the committee.

Mr. ASWELL. I am giving you some evidence now.

Mr. JACOWAY. What State is that?

Mr. ASWELL. Louisiana.

Mr. KINCHELOE. I am talking about the big timber States of California and Oregon and out there where these great millions of acres of timber and land are, where they say there is less sentiment for the preservation of timber than in any other place. In view of that, under your plan, do you think that those legislatures out there where there is no sentiment—and my experience is that a legislature is pretty responsive to public sentiment, as well as Congress—do you think that they are likely to come across with a lot of money when there is no sentiment in their State to do it?

Mr. THOMPSON. His explanation, as I understand it—the explanation of the gentleman from California—was that the local communities where the forests were situated wanted to induce activity in order to create trade, I suppose.

Mr. KINCHELOE. Certainly.

Mr. TINCHER. So far we have only had one State pledged to come in if we pass this bill. That is Louisiana. Now, if Louisiana is going to come in and adopt these regulations and have them, of course the Capper bill would not hurt Louisiana at all because they are ready for it.

Mr. ASWELL. Louisiana does not want to be dictated to by the Capper plan. [Laughter.]

Mr. TINCHER. They are willing to do it, but they do not want to be told to do it?

Mr. KINCHELOE. What do you say to the proposition, the suggestion of Mr. Pinchot, this morning for Congress to enact a flat law, straight out to the timber owners, to make them preserve these forests on certain reasonable regulations.

Mr. GRAVES. I do not think it is quite as simple as that.

Mr. KINCHELOE. Well, I think it is very simple.

Mr. GRAVES. The working out of it would not be quite as simple as that. I would not, however, at all minimize the fact that in these timber exporting States, the sentiment in favor of really getting down to the practice of forestry on private lands and imposing regulations through the State authority on private owners is exceedingly small. I am candid to confess that during the past year I have been greatly disappointed in the reading of the accounts of those who have been promoting this measure; that that feature of the plan looking to really effective legislation on the part of the States, has not been emphasized; or it has been so glossed over as to give the impression that this measure is not one which looks to requirements by a State on the part of owners to do what are believed to be essential to perpetuate their forests, but that it is rather a measure looking merely to public cooperation, education and encouragement, rather than an effective one with real requirements.

Mr. KINCHELOE. Then you are not in favor of sections 1 and 2 here, as written?

Mr. GRAVES. I am opposed to the Snell bill as it reads to-day.

Mr. THOMPSON. As it reads to-day?

Mr. GRAVES. Yes, sir; I do not think it carries out effectively the plan which it pretends to carry out.

Mr. JACOWAY. You got the Capper bill too, did you not?

Mr. GRAVES. May I speak of that just a moment? I would like to read a tentative draft that conveys my own views as to an effective bill under this general plan. It is a substitute for paragraphs 1 and 2. I have not shown this to any lawyers, so the phraseology may not be in just the correct form, but it will make clear my own views as to how a measure of this sort should be made effective.

Mr. TINCHER. It may have some sense to it if there hasn't been any lawyer connected with it. [Laughter.]

Mr. ASWELL. I agree with you.

Mr. THOMPSON. I do not think it is up to the proletariat to cast invidious comparisons upon the law. [Laughter.]

Mr. GRAVES (reading):

"That the Secretary of Agriculture, through the Forest Service, is hereby authorized and directed, in cooperation with appropriate officials of the various States or other suitable agencies, to determine for each forest region of the United States the essential requirements in protecting timbered and cut-over lands from fire, in reforesting denuded lands, and in the cutting and removing of timber crops by such methods as will promote continuous forest production on lands chiefly suitable therefor; and the Secretary of Agriculture is further authorized to cooperate with the various States, and through them, with private and other agencies within the States, in establishing and making effective in practice such requirements as are essential to insure forest growth adequate to protect the interests of the public.

"SEC. 2. That cooperation, under the provisions of this act, with any State shall be made contingent upon such State putting into effect by law, by adequate regulations, and by effective administrative practice such equitable requirements for the prevention of forest fires, and for the cutting of timber, as may be determined by the Secretary of Agriculture to be necessary to insure continuous forest production on lands best suited for that purpose, and that in no case other than for preliminary investigation shall the amount expended in any fiscal year exceed the amount expended by the State for the same purpose during the same period: *Provided*, That during a reasonable period pending the passage of required legislation by the different States, cooperation is authorized to the extent necessary to demonstrate the effectiveness of organized fire protection and of other measures of forestry."

Mr. JACOWAY. The idea there is to make the whole program permissive on the part of the State as opposed to a mandatory plan?

Mr. GRAVES. The idea of this is to make the expenditures on the part of the Federal Government contingent upon the States putting into effect mandatory legislation.

Mr. JACOWAY. Then it would be a permissive program on the part of the States?

Mr. GRAVES. If they did not want to come in they need not do so.

Mr. KINCHELOE. Suppose that all these States that have these millions of acres of timber where, as I said a while ago, it is shown that sentiment there is less for the protection of the timber than anywhere else—suppose they decline to come in under this—

Mr. ASWELL (interposing). They will not all decline.

Mr. KINCHELOE. I am talking about the Western States; not Louisiana. Louisiana is already in, I understand. [Laughter.] Then the bill would not be of much account, would it—that is, it would not accomplish the purposes intended?

Mr. GRAVES. It would not be effective immediately. It would be a progressive matter.

Mr. KINCHELOE. Do you think that the regulations that the Forestry Service now has, and is imposing upon the purchasers of Government timber, are reasonable?

Mr. GRAVES. Yes, sir.

Mr. KINCHELOE. Do you think they would be reasonable if they were imposed upon private owners?

Mr. GRAVES. Yes, sir.

Mr. KINCHELOE. Well, they say here that they do not want that kind of regulation. They are ready to receive whatever subsidies are coming to protect their forests and reforest them, but I asked one or two of them whether they would be willing to submit to the same regulations from the Secretary of Agriculture that he imposes upon those who purchase timber off the Government forests, and they say not.

Mr. GRAVES. It is my impression that they do not want regulation, and that is the reason why I would suggest, in case this type of legislation is considered, that it be definitely required that as a necessary condition for co-operation the States require of private owners such methods as you are speaking of.

Mr. KINCHELOE. And your amendment gives the Secretary of Agriculture in the last analysis the power to do it, too.

Mr. TINCHER. You are getting clear back, though, in your amendment, to offer them sufficient financial inducements to have them come in and cooperate.

Mr. GRAVES. Yes, sir; that is the basis for Federal action. It is the only real club, if I may use that expression, that the Federal Government has to induce the States to pass this legislation.

Mr. TINCHER. But we have another club, though. If it is a good thing for them, we have a club here that will make them do it without hiring them. [Laughter.]

Mr. JACOWAY. Another thing about it, the whole administrative features of the bill would be administered from Washington, would they not, practically copied after the Federal roads bill and things of that kind? The administering of this law would be in the Federal Government entirely.

Mr. GRAVES. No; this is working primarily through the States.

Mr. JACOWAY. But the Federal Government at last would have the last say—so, would it not?

Mr. GRAVES. So far as the Federal Government has any authority in the premises. The difference is this: At the present time you are appropriating \$400,000 for the Forest Service to cooperate with the States in fire protection and there are certain conditions under which that money is granted to the States—that is, that the States shall spend at least as much as is allotted to them. Under this plan there will not only be the requirement of their expending an equal amount of money, but also that they should put into effect such legislation as is necessary to insure the right handling of private lands.

Mr. JACOWAY. And whatever money is furnished will be turned over to the Federal Government and by them administered?

Mr. GRAVES. No; the money will be expended very much as the Weeks law money is now expended. So far as the Federal funds are concerned they will be expended under the general direction of the Secretary of Agriculture, through State machinery. I am referring to such measures as have directly to do with the private lands.

Mr. KINCHELOE. Do you agree with Mr. Pinchot that the greatest thing that is devastating the timber reserves of this country to-day is the reckless cutting by private owners?

Mr. GRAVES. I do not know that I ever heard him say it in just those terms.

Mr. THOMPSON. Would you agree with that statement?

Mr. KINCHELOE. Do you agree with that statement?

Mr. GRAVES. Yes.

Mr. JACOWAY. Did Mr. Pinchot state that?

Mr. KINCHELOE. I thought he did this morning.

Mr. JACOWAY. I thought he said fire protection was the paramount thing.

Mr. THOMPSON. He is here and can speak for himself.

Mr. KINCHELOE. I understood him to say this morning that the greatest devastation to the timber reserves of this country—any one thing—was the reckless cutting by private owners.

Mr. PINCHOT. Absolutely. Meaning by "timber reserves" the whole forest area of the country.

Mr. KINCHELOE. And I was wondering whether you agreed to that statement or not?

Mr. GRAVES. Technically, no; but from what I understand Mr. Pinchot to mean, yes. [Laughter.]

Mr. KINCHELOE. Now, I would like to have you explain your answer.

Mr. GRAVES. By which I mean, instead of saying "reckless cutting of timber," he means the failure to handle their forest property in a proper manner, which would include devastating methods of cutting and failure to properly protect their forests from fire, and to carry out other measures.

Mr. KINCHELOE. Now, do you agree with that?

Mr. GRAVES. I agree with that; yes.

Mr. KINCHELOE. Now, if that is true, the way they handle their forests, the reckless way in which they do the cutting, if that is the greatest devastator, the greatest one thing that devastates the lumber supply of the country, then why would you object to Congress passing a law—let us get down to a law with some teeth in it, not salve and bribe, but get down to an organic act of Congress forbidding that thing?

Mr. GRAVES. Well, I would like to make this clear, not to qualify my statement of answering in that viewpoint, but in the actual way the thing works out. The actual agency, which is due to the failure of the private owners and causes the greatest amount of destruction, is fire. Now, under the working out of any program, I do not care whether it is Mr. Pinchot's plan or this plan that I propose, the State has got to bear the largest burden in fire protection.

Mr. KINCHELOE. I am not talking about fire protection; I am talking about what Mr. Pinchot said. I understood you to agree to it, and now not to agree to it, and that is that the greatest destructive agency of the forests of this country is the reckless manner in which the private owners cut their timber, having no regard, of course, for the young timber, and the reckless way they do it.

Mr. JACOWAY. Preventing fires, is what Mr. Pinchot said.

Mr. GRAVES. The reason I answered the question in the first place as I did, referring to the technical wording of your question, was because the actual process of cutting, or the actual method of cutting, is not what causes the chief devastation; it is one thing, but it is not what causes the chief devastation; it is that, combined with the fires and the failure of the private owners to properly protect their properties.

Mr. KINCHELOE. The reckless way in which the cutting is done of course makes the fire hazard all the greater.

Mr. GRAVES. It is one of the factors which contributes to the increased hazard from fire. May I express it in this way—that you can not separate fire protection from silviculture—that is, methods of cutting to perpetuate the forests? The two have got to go together, and the proper protection of the forest is essentially right silviculture, and often the method of silviculture is a right method of fire protection.

Mr. KINCHELOE. Then what is your chief objection, and any of your objections, to Congress passing a law regulating the private owners of timber in cutting that timber?

Mr. GRAVES. I have a few objections to Mr. Pinchot's proposal, or the Capper bill. Briefly, they are these: I think in the first place, it looks too exclusively to the problem of the big timberland owners and to the big lumber operations and does not provide sufficiently for the great areas of second growth and

cut-over lands and lands in small ownership. The old timber is going pretty fast; the actual number of owners of it is comparatively small—I presume not over about 2,000 of really large tracts of timberland remain. The bulk of our forests are already to-day of the character of second growth and cut-over lands, and I do not think that the Capper bill is looking sufficiently or provides sufficiently for the requirements on the part of the public for the handling of that class of land. I do not think that that bill—and certainly not this measure before you—sufficiently considers the great service of the forests in the development of the sections of the country where the forests are located. In fact, at the end of section 1 of the Snell bill this expression is used, referring to the methods of forestry which should be used, “favorable for forest protection and renewal with a view to furnish a continuous supply of timber for the use and necessities of the people of the United States.” That is only one service of the forest and one purpose of this whole proposition. We have got a great land problem which concerns nearly a third of the area of the country, and the way the forests are handled upon it is going to have a profound influence on the development of the region, on the maintenance of local industries, and on the building up of agriculture and an industrial structure in the rural communities. I do not think that the Capper bill gives sufficient consideration to that viewpoint, because it apparently is aimed too exclusively toward the problem of the large timber tract and the large lumberman.

The third point is the one I have just mentioned, that it appears to distinguish between fire protection, which it presumes will be handled by the States, and silviculture, which is going to be primarily a function, a requirement of the Government. I think that if you have a Federal law which deals directly with the private owner the question of requirements for fire protection and the requirements for cutting, whatever those may be, should go together.

And, finally, I think any Federal law of that kind is likely in the long run to tend to reduce the responsibilities on the part of the individual States. I think any strong, permanent policy of forestry should place the largest burden, the largest responsibility, down the line, should make the States do their part in furnishing their appropriations and in assuming their responsibilities in every direction. But if you place the control of this feature of private lands on the Government I believe that there is going to be a tendency for the States to feel that since the Government is assuming the responsibility for forest control it should also assume the financial burden; exactly as in some cases there has been a tendency here and there in the operation of the Weeks law—I mean the portion of the Weeks law dealing with cooperation for fire protection—for individual States to assume that they can reduce their appropriations for fire protection because of the Government cooperation.

And, finally, I think that the responsibility on the part of the individual in this whole thing should be emphasized. I would like to say with reference to the Capper bill, with entire candor, that if a bill of the kind I have advocated is going to fail to receive the backing of those interested in bringing about a national forest program, so far as concerns the insistence on mandatory legislation for the right methods on private lands, I for one shall consider that it is not going to be possible to carry it through.

Mr. Tinscher's suggestion that our only club is the appropriation is true. If the Government is willing to spend a million dollars to distribute among the States with no other requirement than that they shall match dollars, that is the only club that you have got for a greater requirement is gone, and I see no other way, if that is the program, than to turn to a measure of direct Federal action like the Capper bill.

Mr. ASWELL. Could you enforce direct Federal action? Could a direct Federal act, a mandatory act, be enforced?

Mr. GRAVES. I think so.

Mr. ASWELL. You would have to have the sentiment of the people in each community behind it.

Mr. GRAVES. I think in the long run that probably could be secured. The Government would probably work through State machinery as far as it could. I do not fear the practical operation, so far as that is concerned, in any of these regulatory measures. When the Forest Service first introduced methods of silviculture, restricted cutting, and all that sort of thing, on the national forest lands, there was a great deal of uproar and opposition on the part of the practical lumbermen. They simply had not worked the thing out. They were fearful of taking a contract with the Government for fear that some

ranger or other local man would impose unreasonable regulations upon them. It simply took a few years of practical working to bring an entire understanding about on that.

Mr. ASWELL. That is true, but if you would undertake to regulate the cutting of timber by Federal tax you would not be cooperating with any State or the machinery of any State, you would not be connected with the machinery of any State if you carried out that proposition. How would that do?

Mr. GRAVES. Personally I am in favor of the other method, but I seem to be alone so far as this strict regulation is concerned. If really effective regulation can not be secured under my plan, I am in favor of direct Federal action like that of Mr. Pinchot.

Mr. ASWELL. Through taxation?

Mr. GRAVES. Through some such method as that.

Mr. TINCER. I do not know whether I have got this straight yet or not, but it is an interesting proposition. Now listen and see if I have got it sized up right. One method would say to the folks down in Louisiana: "Here is a million dollars of the Government's money, assemble your legislature here and we will let you have this to fight forest fires and to replace your forests." And the legislature would meet and decide whether they would match that money or not, and that would depend upon the sentiment, of course. I think in Louisiana, from what I have understood here, they would do it. I do not know whether they would match it in some other States or not.

Now, the other proposition is to say to the country: "The lumber situation is such that it has been decided by the American Congress that it is a question of such importance to all the people that we have decided to make a Federal law on the subject. We are not going to confiscate your property or anything like that, but if you want to cut your timber you cut it according to these regulations and pay nominal tax; if you do not cut it according to these regulations you will pay into the Treasury so much a thousand feet," which will prohibit—the tax will prohibit—them from cutting it at all unless they come within those regulations. We can pass a tax law, and by the tax system we can regulate the industry if it is deemed of sufficient importance to have that done by legislation.

Now, I understood the objection of one of the witnesses this morning who was objecting to the proposition of cooperation as contemplated by the Snell bill to be that the States that did not have any timber—any lumber—would probably be very willing to cooperate, but the ones that the other States had to depend upon for lumber would probably be slow in getting into the organization.

The thing that bothers me is this: If it is of sufficient moment—sufficient importance—one of the great questions of the day, why tamper with it? Why not adopt the regulations that would be imposed here, imposed under the taxing system? No one contemplates that they would be different regulations from what we would purchase by the subsidy system.

Mr. KINCHELOE. Why would there be any conflict in that provision of the Capper bill and this anyhow? The Capper bill by direct law would forbid the wreckless cutting of this timber and therefore protect it. The fundamental principle of this bill is not only to protect the timber but to perpetuate it.

Mr. JACOWAY. The difference in the two bills, as I understand it—

Mr. KINCHELOE (interposing). There is a difference, but are they in conflict with each other?

Mr. JACOWAY. One seeks to enforce the provisions of the bill under the taxing power of the Constitution, making it absolutely mandatory; there is no escape from it. Under the other it is entirely a permissive proposition, and the State can, if they so desire, match dollars and come in.

Mr. KINCHELOE. I see the difference, but is there a conflict? Suppose both were enacted. Would they conflict?

Mr. JACOWAY. We would not need both. Both of them could not work together, as I get it.

Mr. GRAVES. May I suggest that under the plan that I am proposing it is not really a question of matching dollars.

Mr. JACOWAY. Ever since I have been in Congress you have been coming before the Agriculture Committee asking for appropriations, and rightfully so. I remember your testimony, I think, the first time I sat on the committee, and it was to this effect, that here the Federal Government had a vast estate in its timber resources, if properly protected. Your argument was that if these appropriations were forthcoming this vast estate, instead of being ruined, lost,

would be preserved. Believing in the soundness of your argument, the committee year in and year out gave you these appropriations. Now, in a word, I would like for you to state what has been the beneficial results of those appropriations and what estate have we preserved, and if it has been one of money wisely expended.

Mr. GRAVES. There is not the slightest question about that. The largest of those appropriations went to the administration, protection, and development of the lands owned by the Federal Government. But those lands owned by the Government are restricted in area, and though in the aggregate large, can not by any means meet the full problem of forestry of the country.

Mr. ASWELL. Have you increased the Federal forests?

Mr. GRAVES. Without any question the productive power has been increased.

Mr. ASWELL. How much more land is there now?

Mr. GRAVES. That is from different appropriations, for the purchase of lands, but what I had in mind was the increased productiveness and the ultimate value to the public.

Mr. THOMPSON. You have decreased fires?

Mr. GRAVES. Decreased fires, and as the result of the administration there has been a very large increase in the productivity of the forests, because through the fire protection and right handling of the forests there is a reforestation going on very rapidly all through the public forests.

Mr. JACOWAY. The actual physical timber that you saved, as I get from you, has justified the appropriations?

Mr. GRAVES. The actual saving of timber from destruction would far more than justify the expenditures. Even if that were not the case, the increased productiveness of the forests would also justify it. Formerly the forests were going downhill, decreasing in productiveness every year; now they are on the increase.

Mr. JACOWAY. Are the observations you have made here today the product of your study as Chief Forester from a Governmental standpoint and applied to the provisions of these bills?

Mr. GRAVES. Primarily, yes, sir; although I have continued my study of them since.

Mr. JACOWAY. I understand that.

The CHAIRMAN. If that is all, we are very much obliged to you. We will now hear Mr. Kirby.

STATEMENT OF MR. JOHN H. KIRBY, PRESIDENT OF THE NATIONAL LUMBER MANUFACTURERS' ASSOCIATION, HOUSTON, TEX.

Mr. KIRBY. I am president of the National Lumber Manufacturers' Association, residing at Houston, Tex. I am a native Texan, Mr. Chairman. I was born long before any of you gentlemen were even youths, on a little creek that winds its way through the piney woods of eastern Texas.

Mr. JACOWAY. In Tyler County?

Mr. KIRBY. In Tyler County, as my friend from Arkansas says, and I have been there all my life. I have been in the lumber business 42 years, first as a logger assisting in the rafting of these yellow-pine logs down the Neches River into the mills at Beaumont, Tex., and then later in the business on my own account as an employer. I have been in that capacity for the past 36 years. I mention this merely to show you that I ought to have some reasonable familiarity with the forestry conditions in my section of the country.

Our forest down there is largely the long-leaf variety of the yellow pine. You have that character of forest in Texas, Louisiana, Alabama, Mississippi, Georgia, Florida, and possibly small areas in other States.

Our forestry problem differs from the forestry problems of the East, of the Lake States, of the west coast very substantially, and differs somewhat from the forestry problems of Arkansas and Missouri and other States where they have quite a large lot of underbrush. Forest fires in the long-leaf district of Texas and all of the other Southern States that grow long-leaf pine are not a menace to our standing forest, but they are to the little seedlings. There is no underbrush and there is nothing to create heat except the needles that fall from the trees, and the grass that grows upon the ground, and when they are dry and combustible the fires often sweep over those areas, and if a seedling is not far enough away from the heat to prevent the bud from being scorched it

will be killed. But there is no such thing as injury from forest fire to a sound standing tree anywhere in the long-leaf district of the South. There is not much danger from fires in the short-leaf districts of the South to sound timber.

Mr. THOMPSON. Just a question right there—where you have lumbered over any of that land doesn't the stuff that is left on the ground make enough fire to kill the trees?

Mr. KIRBY. Even where you have lumbered over, if fire gets out in your débris it will in some instances injure the small trees that are left standing. There is one fire danger but it is not a very great one and it does not destroy any commercial timber but does injure to an extent the younger trees that are left when you have logged an area off and therefore retards somewhat the reproduction of the lands.

I appear here to-day at the request of the National Lumber Manufacturers' Association, of which I have had the honor of being president for the last four years. That association is composed of the regional associations, manufacturing substantially every species of wood in this country. There are three associations which we call regionals in the South, all manufacturing pine. There are other associations in the West, some manufacturing redwood, some white and sugar pine; some fir, some hemlock, and some other woods, and in the inland empire there are still other associations and in the northern part of our country, up around the Great Lakes, there are still other associations, and some 12 of us are members of the National Lumber Manufacturers' Association in a sort of a federation of which the National represents the entire authority.

On the 1st of December at a meeting of the board of directors of the National Association in Chicago they tendered to you, Mr. Chairman, my services in connection with this forestry inquiry. We have not come here asking for favors. We have not come here—and that is especially true of the South—and mind you I can not speak so definitely for the west coast or for the western pine pine or for the northern manufacturers as I can for the southern because I know their problems better, and I know more their wish and purpose, but we have not come here to ask favors; we have come to try to assist you in formulating a national forestry policy that will meet the public welfare, the demands not only of the present but of posterity, because whatever may be thought to the contrary and without taking the matter exclusively to myself or throwing any bouquets at myself, I want to say of the manufacturers of lumber in this country that they are a patriotic bunch of men; they have the same solicitude for posterity as other red-blooded Americans who are interested in the country's welfare and in the thrift and progress of the people.

This bill before you is not our bill in the sense that it is formulated by the manufacturers, and it has features in it that are especially obnoxious to some of my friends in the South, and those are features which would impose special burdens upon the privately owned property.

About 20 or 22 years ago the Forest Service of the United States, acting through the United States Forester, who, according to my recollection, was the same gentleman who addressed you this morning, put out statistics showing that in 14 years the lumber industry in the South would come to an end through the exhaustion of all the timber supply. Prior to that period, if a man had an ambition to go into the business of manufacturing lumber he could go anywhere in the South where there was a forest and drop his mill and be assured he could continue the operations of that mill just as long as he was willing to pay the price of the stumpage, because it was all on the market—practically all. Very few lumber manufacturers at that time owned any forests in their own right. The forests of the South were owned by the State government, the State and Federal Governments, the Federal Government still having some areas left—owned by the State governments, by local enterprises like the railroads, which had been bonused with a grant of these lands by the small funds of the respective States, and the timber was all on the market.

Influenced by this opinion that the forests would soon be exhausted, the lumber manufacturers of the South went out and bought practically all of the forests, which placed the manufacturing industry in respect to lumber on a different plane from that of any other manufacturing industry in our common country, in that the man who desired to enter into the business of manufacturing lumber, as a first step must go out and acquire at least 10 years' supply of raw material, because if he had less than 10 years' supply it did not justify the large plant investment that was necessary to enable him to become a manufacturer.

Just think what it would mean to the country to-day if the cotton manufacturer had to go out and buy a 10 years' supply of cotton and warehouse it and insure it and pay taxes upon it and carry it for all of that period; or the shoe manufacturer, if he must go out and buy his raw material, leather, or any other manufacturer, all of whom use raw materials, if they had to assure themselves of a supply for such a period. That is the condition of the lumber manufacturer to-day.

I am not a large landowner, nor is there any lumber manufacturer in Texas who is a large landowner. The company I now have the honor of being president of and the principal owner, the Kirby Lumber Co., one of the large operators in Texas, has been operating for 21 years upon stumpage bought from the other man, without any interest in the fee title to the land. We have left to-day three and one-half billion feet of timber, about. Less than 10 per cent of that stands upon land where we own the fee title. In Texas the lumber industry to-day is conducted by the men, to the extent of at least 80 per cent of its output, who own only the trees and the timber rights and not the fee title, so that Texas would present a peculiar problem in forestry.

Who is the beneficiary? Who is to take the burden? If you place the burdens upon us, as was advocated here this morning—limitations upon operations of those who own timber privately—that is, aside from the public forests—where does the burden rest? It rests upon us manufacturers who have gone out at our own expense, with large investments, and tried to insure ourselves, under definite contract, a timber supply for a long term of years, to carry on our industry in a successful way.

In Texas we have another situation that does not apply to any other part of the Union as far as I know. You remember that this great empire came into this Union by treaty, and it was not carved out of the national territory. We have always retained control of our lands. The State of Texas has been the sovereign, and not the United States, from which we derived title to these lands. We have a constitution, as all the States have. Our constitution requires that taxation shall be equal and uniform, and that ad valorem taxation, for the purpose of supporting the State government, the county governments, the municipal governments, the public-school system, the public-road system, and the drainage system—all that sort of thing—shall be based upon the market value of the citizen's property. The rate is fixed by the legislature, of course, but the commissioners' courts in each of the counties, composed of four commissioners and a county judge, are the exclusive judges of the market value of the properties within the confines of that county. There is no appeal from their decision, except in cases where they have violated the rule that taxation shall be equal and uniform in all cases. Many counties in Texas, especially in the timber section of eastern Texas, where I grew to manhood, and in which I have been operating all my life, are so poor to-day that in order to maintain the public schools we are compelled to submit, as property owners, to a valuation upon our timberlands five times the market value thereof, especially the cut-over lands. It is not so onerous on the landowner who has uncut forest, but in our cut-over lands the valuations in many of those school districts are at least five times what you could sell them for in the market. So in all counties the valuations for taxation purposes, in order to carry on the activities of the county, must be upon the same basis.

Now, there is no power in the Federal Government to suspend our Constitution in regard to the method of taxation. You can not give us relief, and you ought not, I respectfully submit, to give us any further burdens than we now have. That is the problem of the South, in so far as the forestry plans are concerned.

The balance of the country has problems, and in so far as the National Lumber Manufacturers' Association is concerned it covers the whole country, and our problems differ. Our problems in the South differ from those of the Pacific coast. Those of the Pacific coast differ from those of the lake region. Those of the lake region differ from Virginia and North Carolina. The views of the National Lumber Manufacturers' Association are just these: We are concerned about posterity. We are not so much concerned about ourselves, in so far as the Government is concerned, because that is not the Government's problem, but the Government's problem is of deep concern and deep solicitude for posterity, and we want as citizens to do our full duty in connection therewith. Whatever practical forestry plan you may formulate for the purpose of assuring to posterity a supply of wood we desire as citizens to cooperate with it.

you, but we do not want you to burden us in this hour beyond our power to endure for the purpose of meeting the views of some thoroughly impractical people who do not know our problems and who can not understand our motives or who refuse to understand our motives.

The proposition was laid out here this morning and reiterated this afternoon that the principal menace about it to-day was the reckless methods of logging or operating privately owned lands. I want to tell you—and I can come with all the witnesses that are necessary to convince any impartial mind in this country, that only in rare exceptions has there ever in the last 40 years been resorted to any kind of reckless logging methods on privately owned lands. There have been some on publicly owned lands, where the operator had no interest other than to get the logs away, but on privately owned lands every timber owner has from the beginning taken to his mill and placed upon the market every piece of wood out of which he could get a penny of return. To-day 54 per cent of the wood turned out of the mill in the South does not pay the cost of the product. That has always been so in some measure. There is the complaint that those magnificent forests upon the Great Lakes in Michigan and Wisconsin and Minnesota would be there to-day but for the reckless methods employed by the pioneers in destroying them. Now, I know something about those forests. I never operated any of them; but when I was a boy we understood that they were inexhaustible; when I was a great big boy, big enough to carry a chain, my father exchanged 320 acres of this juicy pine land down in Texas for a Singer sewing machine, and he was glad to get rid of it. So it was regarded in those days that those forests were absolutely inexhaustible, but now we know to the contrary. Fourteen years have already elapsed, and the survey last year showed standing in the South still 352,000,000,000 feet of standing timber. At the present rate of consumption it would run us another 26 years, so we do not know how long after that period we will still have some forests; but it is not going to be perpetuated unless steps are taken, just as Col. Graves has told you, to increase the growth.

These pioneers that went into these forest States, maybe they milled recklessly, but they marketed everything that came out of the sawmill for which they could get a dime of return. Who is the beneficiary? Thousands of homes dot Kansas, Iowa, Nebraska, Missouri, and the other treeless States in the Middle West, in consequence of the sacrifice these pioneers made up there of those forests. They milled everything they could get a penny out of. They sold cheap lumber, and they built good homes, and those States of the West are the beneficiaries.

Down South to-day we are leaving in the woods, not through any fault of ours, certain quantities; not through reckless logging, but just because it will not pay anything at all.

Men come from a locality that needs wood and say, "These great fires that are being sustained with slabs"—if you go down to my friend Jacoway's mill you will find the same thing—they will say "What terrible, what awful waste!" Well, it is not waste. There is no market for it. Nobody wants it. Nobody would pay the freight on it from the mill, and the expense of loading it, to the point of consumption. So that these things that look to the man who is not practical, like waste, are not waste, because every man has a selfish interest aside from any other interest, in saving everything that comes from his mill from which he can get a dime of return.

For instance, in our mill down there, take the matter of red heart. Everybody knows something about red heart. That means rotten lumber, in the sense that the tree is old, and it has begun to decay, and it is classified as red heart. It is not merchantable. In certain stages, of course, some of it is; but in that red heart there is probably a section 4 feet long of sound timber. They take that red-heart tree to the mill. It costs them nothing. They have already paid taxes on it for all these years on their lands. They have already sawed down the tree, and they discover that it was entirely defective. They have already paid the cost of sawing that log just as though it was a good one, because these fellows who saw the trees down do not get paid according to the merchantability of the log. They get paid according to the contents of the log. They load it on to their cars, and they transport it into the mill. The mill is already built. It is in the pond. They drag it up and put it through the mill even for that little 4 feet in one end. That is what we are doing. In every mill in the South they are doing that; but there are some places in the world where you can not get anything at all for that red heart. It is just good for fuel, and that is all it is used for. In some instances where there is no local

demand for the fuel, you can not pay the freight on that to the point where it is used, and you send it to your slab pit. That is what is burned in the slab pit.

Now, I want to especially deny the impeachment that has been placed upon the lumber manufacturers of this country, in every part of this country, that their methods are wasteful or reckless or without regard to the public welfare. If there was no other reason why they should be considerate and try to conserve the national wealth and national interest, their selfish interest would prompt them to do it. So that these charges, in so far as the alleged willfulness of these acts are concerned, come from men who do not know.

We have in the South a larger area of cut-over land than any other section of this country. This land will, in the course of time, produce a forest, but we can not pay our taxes every year. We can not pay the State and county taxes and these school taxes, these road taxes, and these drainage taxes, and these local taxes every year, and get a crop every hundred years. Now, you absolutely can not look to privately owned lands in the South for reforestation on any basis that will keep up with the needs of society. If it is a Federal duty—and I am not prepared to admit that it is; if it is a Federal duty to supply this country with forest lands, then it is a Federal duty. If it is a Federal duty, there is only one way to do it. You must not impose upon the private property owner. You must, of course, and you will, out of respect to the Bill of Rights—I have so much respect for it that I always carry a copy of it in my breeches pocket—especially the fourth amendment thereof, that declares that private property shall not be taken for even public use except with just compensation—and you ought not, by exercising the taxing power, seek to circumvent that contract that we have with all these American people, not only with respect to timber property, but any other property, and to preserve us in the rightful use of same.

I think that this great country is great to-day more for the reason of that provision in our Constitution than anything else. The richest country in the world, of course, we are proud to admit—and when you stop to consider that we only have 6 per cent of the population of the world; that our land area is only about 6 per cent of the land area of the world; that we own one-third of the property of the world; that we own 40 per cent within our borders of all the railroad mileage in the world; that we have more than 40 per cent of all the gold in the world—we must conclude that that did not happen by accident. Some will say, "Well, God bestowed upon us such prodigal gifts that we were bound to occupy that relation." Is that true? We have had largely a monopoly on the production of cotton, but do you know any farmer or anybody else who has been enriched through producing cotton? So, why do we have this situation here? We haven't got a monopoly on the timber of the world. Men who are well informed tell us that there is standing in Russia to-day more timber than ever stood in the United States. We haven't a monopoly on the iron ore. We haven't a monopoly on any raw material.

Our position with respect to the commerce of the world is not such as to enable us to enjoy advantages in international commerce that our competitive nations do not enjoy. Our scientists have not dug into the hidden secrets of nature, in chemistry and otherwise, and made those hidden secrets of nature contribute to our progress and prosperity in a greater degree than the scientists of other nations have. Then why are we that? Because of that fourth proposition in the Bill of Rights that every citizen has the right to enjoy all he can honestly earn, and if he saves it he will be protected in the property in which he has invested it. That is what I have done as an individual. I never had anything to start with. I have a little something now, and it is all in trees; mighty little in land. I want to be protected in the enjoyment of that. I want to do my proper duty. I want to pay my taxes. I want to respond to every call of my country at all times; but I want the Constitution at all times respected, and I want to maintain and retain for posterity that wonderful privilege of letting a man enjoy all that he can honestly earn and protect him in the property in which he may invest it under that provision of the Bill of Rights.

Now, with reference to this forestry matter, I wish that I knew the solution for it. I do not like to see an effort made here to bribe States into letting you, the Federal Government, come in and exercise a power not conferred under the Constitution. There is not a line in the Constitution that grants to you this power; not a line. There is no government in this country, under the exercise of its police powers, that can lay a heavy hand on private property, except the government of the States. There is no government in this country that can regulate property rights or the employment of people, or anything of

that sort, except the States. Let us not have any expansion of Federal activity. Haven't we gone far enough, even very far, in the past few years, since we Democrats have been in charge, without extending it any further? Let us get back to a government of laws under the written Constitution; let us respect that Constitution; let us look again at this tenth proposition in the Bill of Rights, which declares that all rights not expressly delegated under this Constitution to the Government of the United States or prohibit to the States, are reserved to the States or to the people, respectively. You haven't got any right to invade our private properties.

Mr. KINCHELOE. Don't you think, Mr. Kirby, that our Republican brothers have gone quite a ways to decentralize government since they have been in?

Mr. KIRBY. Well, I think perhaps they have. Now, if you gentlemen have any questions, I will be glad to answer them as best I can.

Mr. ASWELL. I understood from the various witnesses that one expression was used quite generally, and that was the reckless cutting of timber. They had more in mind, the recklessness in not preserving the smaller growth and leaving it so that it will be reproduced, probably.

Mr. KIRBY. Now, the proposition there is just this: Every man recognizes his young timber as a prospect, as a reserve, and he doesn't want to injure it. He adopts the most practical methods he is capable of devising for the operation of his logging department. He gets these logs to the mill at the least cost he can. I have an organization whose normal capacity is 350,000,000 feet of yellow pine per year. I operate 12 mills. Last year I did not operate them to their full capacity because there was no market for my product, but in the year 1921, operating every department of my business in the most economical way I could, but without cutting my men, but giving them the best pay that I could, I just lacked \$400,000 of earning a postage stamp; so that that shows you something about what there is in the lumber business at the present time.

Mr. JACOWAY. I want to conclude this question. Is there any difference in your position, or would there be any difference in your position, if you owned the land, rather than if you bought the timber rights to the land? Would there be any difference in your position?

Mr. KIRBY. No; in your logging operations all your logging contracts require you to protect the small timber just as far as it is possible to do so without extraordinary expense. That is, you can not resort to wasteful methods, under my contracts, and I presume that is the usual clause in all contracts.

Mr. ASWELL. How could the Federal Government improve on that contract? That is just the point.

Mr. KIRBY. I don't think it can be done.

Mr. ASWELL. I have been over your property, and you do try to preserve the young timber. How would the Federal Government add to your plan?

Mr. KIRBY. It can not be done. I want to recite one instance. I think it was at the suggestion of the witness this morning here that in 1901—I think Mr. Pinchot was Forester, and he sent me about 60 foresters down in Texas, and we tried to start in with the practical plans for the purpose of making this forest—that is, the land owner doing that—and notwithstanding I had made this contract with him, by which I purchased all the timber 12 inches in diameter at the stump at the time of cutting—I have since lowered it to 8 inches at the time of cutting, notwithstanding that was my contract, I consented, not directly through the Forester, Mr. Pinchot, but through his indirect persuasion through John Crosby Brown, of Brown Bros., New York, to permit them to go in there with their practical forestry plans and increase my logging cost very substantially by going around and marking all the trees above 16 inches in diameter, and those that were marked were to be cut. The experiment, however failed, and that was because of entirely another matter that would not interest you. I became involved in litigation with the land owner, and then the court said that I would have to fulfill the contract.

Mr. JACOWAY. You went into the hands of a receiver?

Mr. KIRBY. Yes; they appointed receivers for both companies to hold the property while we settled our row. So that we did not operate under that but two years. But here is the thing—we cut those trees down to 16 inches in diameter, and that which was left looked like a virgin forest, so that when these tax valuers came around, instead of giving that a tax value as cut-over land, they gave it a tax value as virgin forest. I understand that Mississippi has had a worse experience than I had. All those things interfere with any kind of national activity toward control of those matters.

Mr. ASWELL. How much did these foresters increase your logging cost?

Mr. KIRBY. Well, I suppose it would not amount to a great deal, probably 30 or 40 cents a thousand. Maybe more. It is more a matter of roads there. You have got the standing timber, 12,000 or 14,000 feet to the acre, that you could get by cutting down to 12 inches. You cut down to 16 inches and probably you will get 8,000 feet to the acre, so that probably 30 or 40 per cent increase in railroad cost would be the result. Sawing down the trees and carting them out to your railroad would be the same expense, but that probably would be as much as 75 cents a thousand, but it was a considerable increase, especially at a time when there was no profit.

Mr. CLAGUE. That would be true when you take into consideration that the smaller the tree the greater increase over the log when it comes out in the finished lumber.

Mr. KIRBY. No. The smaller the tree the less the increase.

Mr. CLAGUE. But up to a certain size? Take a log that will measure 22 inches in diameter, the board measure will increase over the log scale?

Mr. KIRBY. Oh, yes; substantially.

Mr. CLAGUE. Is that under 16 inches or over 16 inches?

Mr. KIRBY. That is over 16.

Mr. CLAGUE. Always?

Mr. KIRBY. Always. Sixteen inches means the butt. You can not get a 22-inch log out of a 16-inch tree.

Mr. TINCHER. You spoke something about certain measures that were taken under your contract, to perpetuate the forests. Will you tell the committee briefly what they are?

Mr. KIRBY. We are not doing anything in our section of the country except keeping the fires out as far as we can. Keeping out the goats and keeping out the razor-back hogs as far as we can. Those are the three menaces. As I explained in the beginning, fire is not the great menace in long-leaf pine.

Mr. TINCHER. Do you leave seed trees?

Mr. KIRBY. All through the territory there are a lot of these old red-heart trees that are rotten so that we often leave a lot of those, especially in time of low timber values. Some of those red-heart trees will stand there, and they reseed the area.

Mr. KINCHELOE. Do the goats eat up the young crop?

Mr. KIRBY. They would rather have the bud of a pine tree than a tin can.

Mr. TINCHER. Do you favor this Snell bill or any of these bills that we have here?

Mr. KIRBY. Personally; no. In my capacity as president of the National Lumber Manufacturers Association I accepted with specifications as to what those restrictions were going to be.

Mr. TINCHER. I am sorry we could not have had some successful lumberman here instead of you, who have lost so much money in business, but I have heard that you know so very much about this game.

Mr. KIRBY. I have been playing it for a long time. I have been selling your people out in Kansas lumber, for mighty little money, too.

Mr. TINCHER. Somebody else handled the lumber between the time you parted with it and I became the owner of it.

Mr. KIRBY. There may be something in that.

Mr. TINCHER. Do you believe these cut-over timberlands should be exempted from taxation, or that they should be favored in the taxing in some way?

Mr. KIRBY. I think that is the only chance in the world for any practical reforestry in private hands, but it can not be done.

Mr. JACOWAY. Can your State purchase lands for delinquent taxes?

Mr. KIRBY. Oh, yes.

Mr. JACOWAY. Has your State authority to do that?

Mr. KIRBY. Yes, sir.

Mr. CLARKE. Would you say yes to that question about exemption from taxation when you have got your bill of rights in your pocket?

Mr. KIRBY. Oh, yes; you are exempt from local taxation, like many of the States exempt local factories. I think it is discrimination, however. I think it is denying to men the equal protection of the laws; but, then, they do it.

Mr. KINCHELOE. What is the proportion of your cut-over land down there that is suitable for agricultural purposes?

Mr. KIRBY. There has never been a survey, but I should say 50 per cent.

Mr. KINCHELOE. How much land does the State own?

Mr. KIRBY. They do not own any. When I first entered the business down there nearly all of these east Texas counties—there was no lumber business in

those counties and no railroads through there. Nearly all of those forests belonged to the State. They had been set apart as an endowment for the school fund. All of those counties were constantly clamoring to have those lands sold and put on the tax rolls. All over the State there was likewise clamoring to have the lands sold, so that the money could be invested and the present generation should get some benefit from the income, so that they were sold ultimately, so that the State does not own anything now.

Mr. KINCHELOE. I am sure that you and your board of directors have a pretty intimate knowledge of the amount of timber in this country. In your judgment, how many years' supply have we got now?

Mr. KIRBY. I don't know. If we do not build up our production—of course, if the west coast should remain in its present status of production—they have probably about two or three hundred years out there—but when the rest of us cut out they will speed up, so that I don't know how long it will last. There are absolutely no accurate figures anywhere in the country, available anywhere in the world, on the exact stand of timber in our Republic.

Mr. KINCHELOE. Do you export any lumber?

Mr. KIRBY. Yes, sir.

Mr. KINCHELOE. Do you export timber?

Mr. KIRBY. Yes, sir.

Mr. KINCHELOE. To any considerable extent?

Mr. KIRBY. Not much now, because those fellows over there haven't got anything to buy with; but we send considerable to the West Indies and some to South America. A little goes to Europe.

Mr. ASWELL. Hasn't your association collected some data as to the standing timber, etc., and turned it over to the Forest Service recently?

Mr. KIRBY. Yes; last year; That was the Southern Pine Association, not the National Association, but the Southern Pine Association.

Mr. ASWELL. But the Forest Service accepted that as authority?

Mr. KIRBY. I think they d'd. Mr. Rhodes could answer that question, but my understanding is that they did.

Mr. TINCHER. As I understand it, you are here as president of your association, and your association is for the Snell bill?

Mr. KIRBY. Yes, sir; with some restrictions.

Mr. TINCHER. Well, I take it that you have a good many mental reservations about being for that.

Mr. KIRBY. Let me answer that for you accurately. Proposals for legislation had been made about two year ago, one declaring for Federal regulation of the lumber industry, the other for cooperation between the Federal Government, the States, and the private owners in accomplishing better fire protection and other matters. We indorsed the latter, which was subsequently incorporated in substance in the Snell bill, most of us having considered it to be the lesser of two evils, but, nevertheless, to be based on a sound principle and capable, with certain plain restrictions which I have indicated, of promoting a fair and practical solution of many of the most pressing forestry problems, such as fire protection and the increase of public forest reserves.

Mr. TINCHER. Let me see if I understand you. There has been considerable talk about forestry since "Pinchot the First." Now, let us get the record straight. The first bill introduced that was referred to this committee in this matter was the Snell bill. I wondered if it was introduced along the lines you have suggested, as sort of a buffer, for fear there would be some such thing suggested as what is now in the form of the Capper bill, which was introduced subsequent to the time of the Snell bill. There was not any bill pending before this committee at the time the Snell bill was introduced contemplating regulation; but it was for fear that there would be something of that kind come along that prompted this introduction of the Snell bill?

Mr. KIRBY. Well, I can not personally tell you the parentage of this Snell bill in that regard. I know that the first activity within the National Lumber Manufacturers Association was about two years ago when we had a meeting with Col. Graves, then United States Forester out in Chicago, and started a discussion of this subject, and we have been discussing it ever since. It was about two or three years ago.

Mr. TINCHER. Of course, I think if the only theory is that the Snell bill should not be supported except as the lesser of two evils, probably this committee ought to be over listening to Mr. Blanton or somebody make a speech in the Committee of the Whole. That is, if they are both evils, we have no business bringing out any legislation on the subject.

Mr. KIRBY. That is your problem, to find out whether they are or not. I am just giving you my opinion.

Mr. TINCHER. You are a mighty well-informed man on the subject.

Mr. KIRBY. Well, they would operate disastrously in disregard of the rights of private property in the South. I can not speak for the rest of the Nation.

Mr. TINCHER. Suppose both of them were not evils, but that, on the other hand, they both contained good; then the Capper bill, of course, being the more drastic of the two, would have more good. If you view it from the other viewpoint, isn't that right?

Mr. KIRBY. That might be so from the standpoint of what the fellow thought was good.

Mr. TINCHER. You are now talking on the theory that they are both evils. Now, if they are both good, of course the Snell bill is the lesser of the two goods; isn't that so? We have got to have a lot more information.

Mr. KIRBY. I wish I could give it to you, but I really do not think it is a national question.

Mr. ASWELL. Mr. Kirby, you have said, I think rightfully, that the lumber men are concerned in posterity. I have heard you say it before, and I think that is true. Now, if you do not approve of either of these bills, what would you suggest?

Mr. KIRBY. If you had the power under the Constitution, I know exactly what you should do, because you can not wait on the States to do it, because, in the first place, some of the States, like the State of Texas, a great agricultural State—it has not yet been pinched for its lumber supply and they have not been educated up to the necessity of perpetuating these forests. If you had the constitutional power to do it, what you ought to do is to establish forests in well-selected locations all through the country for the purpose of protecting posterity in their wood demand.

Mr. ASWELL. Purchase the land, you mean?

Mr. KIRBY. Purchase the land and carry on their practical forestry there just as you are on your forestry reserves now.

Mr. KINCHELOE. You have the power to do it under section 6.

Mr. TEN EYCK. Do you feel that there is any sort of a policy that might be adopted for general fire protection over the country?

Mr. KIRBY. The fire hazard varies in different localities. You could not make it universal. Fire protection is not so important to us in the South as it is in the North, the East, and the West, so I do not know just what regulations could be prescribed. We would not object to any of those regulations or anything of that sort, and we would cooperate with the National Forestry Bureau in any operations that they want to put on, provided they did not undertake to restrict us in the use of our private property. We think we own that and we are entitled to control it and operate it in a practical way without any fear from any Federal authority.

Mr. TEN EYCK. Right along that same line, what is your idea in regard to a general policy on reforestation throughout the country?

Mr. KIRBY. I do not think it can be carried on in any way at all in private ownership. There may be some way in which it can be done, however.

Mr. TEN EYCK. You do not believe it possible to adopt a general policy for reforestation?

Mr. KIRBY. I do not think there is any encouragement that the Federal Government can give at all. The State governments could be relieved, though, of local taxation, or something like that, but that is clearly not a Federal proposition. You are not going to pay the taxes. You are not going to pay these little schools out of the Federal Treasury, so it is a problem that belongs locally to our people and can not be solved by the National Government.

Mr. TEN EYCK. Do I take it from what you have said previously that your idea is that the United States Government should acquire necessary lands and reforest them, where nothing else can grow but lumber, and protect them for the future use of posterity?

Mr. KIRBY. I have not looked into the constitutional feature of that. I say, if the Constitution does not forbid, that is the only way open to you to carry on the forestry on a scale that would be of any substantial interest to posterity.

Mr. CLARKE. We are already purchasing thousands of acres of land for the protection of our watersheds. Why isn't it possible, from a practical standpoint, to take these lands and start now to grow the forests, under the Government's supervision, under that same Government supervision. As they grow up, of course, the cutting of the timber will be done as it is in foreign countries.

Mr. KIRBY. There is a difference under the Constitution and under what you are doing under the Weeks bill and what you would be attempting here. Under the Weeks bill you are attempting to preserve the navigable streams of this country, jurisdiction over which is especially granted under the Constitution.

Mr. CLARKE. Why are you not killing two birds with one stone?

Mr. KIRBY. Of course, you have here an incidental protection when you Democrats put it on for revenue only.

Mr. KINCHELOE. It was enacted under the guise of protecting transportation by water.

Mr. KIRBY. Yes. If there is any constitutional warrant in the world for the appropriation of Federal money for the creation of forestry preserves in this country on logical lines in the interest of posterity, it ought to be done, because I agree thoroughly with what Mr. Pinchot said this morning with respect to the future. I do not think the disaster is as imminent as he says, but it will come in the course of time, because there was a time when all of our country from St. Louis to Maine was a great forest. There will come a time when our wood supply will be exhausted, not because we are the largest users of the wood particularly in the world. We are the largest users of everything, according to population. It is not wood only, but it is everything.

Mr. TEN EYCK. What is your idea as regards the general policy of restriction in relation to permitting the cutting of timber?

Mr. KIRBY. I do not think this Government or any government in America has any right at all to interfere with a citizen in the use of his private property.

Mr. TEN EYCK. Not for the benefit of the future?

Mr. KIRBY. No, sir; for the benefit of nobody.

Mr. TEN EYCK. What was your idea of entering into the agreement that you got into litigation over with Mr. Pinchot along that line? Was that an experiment?

Mr. KIRBY. That was an experiment. There was a little selfishness behind it, I suppose. I would make my forest last longer, and I would get more profit out of it.

Mr. TEN EYCK. Wouldn't it be a good idea to adopt a general policy if all forests could be made to last longer and you could get more profit out of them?

Mr. KIRBY. But these long-headed fellows who own these forests would resort to that if their judgment was convinced that it would happen that way; but I was easy and didn't get far with it.

Mr. JACOWAY. Do you know whether or not the fire menace is greater in the western country than it is in the South?

Mr. KIRBY. I do not know; but going through that country out there I saw burned-over areas, so I know that in those particular areas they have suffered great disaster. How extensive it is, I do not know.

Mr. JACOWAY. As far as the South is concerned, however, you know that the forest fires are not a menace?

Mr. KIRBY. They are not in the long-leaf belt.

Mr. TINCHER. The proposition of appropriating Government money and engaging in business for the public good, that is not profitable for the individual to engage in, of course has its limitations. The time has approached and now we are proposing to raise taxes to engage in these various things. If you make up your mind about what you think we ought to do on this forest proposition, I wish you would let this committee know, because I anticipate we are going to have some little trouble working out this situation.

Mr. KIRBY. You have paid me a very high compliment, and I should be delighted to assist you if I can. If I can see the light I will be delighted to pass it along.

Mr. KINCHELOE. I understand you can not follow the line of reasoning of these western fellows who have been here?

Mr. KIRBY. I am not in sympathy with all of those provisions. I am not in sympathy with any features of the bill that lays a heavy hand on the right of the citizen to do as he wills with his own property.

Mr. CLARKE. Doesn't that reflect itself in the added cost of the timber to the consumer?

Mr. KIRBY. Of course; it is bound to do that. Whatever increased cost is produced we pass along, if we can. Sometimes we can not do it.

Mr. TINCHER. I am sure I never paid any price for any lumber that made me feel at all grateful to the producer of the lumber. Perhaps when we get a good protective tariff and get some revenue we can figure on appropriating some money to purchase some land.

Mr. KIRBY. Well, you will be so thrifty that you can buy it.

Mr. TEN EYCK. Col. Kirby would not agree with that, because he believes that a man ought to do as he pleases with his money.

Mr. JACOWAY. Oh, he is a protectionist.

Mr. TINCER. I am quite sure that he is for a protective tariff by just looking at the man. I am sure that he is for strengthening the emergency tariff.

Mr. TEN EYCK. I just remarked, Col. Kirby, that you thought that a man ought to do with his money as he pleases, without any restrictions.

Mr. KIRBY. No; there are some things that might be forbidden. For instance, national prohibition may be all right. You are forbidden putting it into that, as far as money goes, but a man's property, aside from money, ought to have the same status as every other man's property and he ought to be protected in its use, without sacrificing it and not taking it any time for public purposes without just compensation.

Mr. ASWELL. You have overlooked one point in regard to the fire hazard in the South. You know in the South a young tree grows out of reach of the fire in a year, but that is not so in the North and the West. That is the difference.

Mr. KIRBY. That is not entirely so. In the North you have quite a large amount of undergrowth.

Mr. ASWELL. In the South the young tree grows out of reach very rapidly.

Mr. KIRBY. I think it does, because it does not take it very long to get out of reach down there. Mr. Chairman, am I excused?

The CHAIRMAN. Yes; thank you very much. Are there any other witnesses here that desire to be heard?

Mr. KELLOGG. I understood it was your desire, if possible, that the hearing be closed before 6 o'clock.

The CHAIRMAN. Do you want to go on now?

Mr. KELLOGG. If everybody else has been heard; yes.

The CHAIRMAN. If that is all, then we are ready to hear you.

Mr. KELLOGG. Mr. Snell had to leave to attend a committee meeting, and he asked me to speak for him.

The CHAIRMAN. Very well.

Mr. KELLOGG. If everybody else has been heard, Mr. Chairman, under permission granted Mr. Snell last night, we ask leave to file some statements from witnesses who could not come here, but who were prevented from appearing yesterday, and then to have two closing statements, one by Mr. E. T. Allen and the other by myself. We will undertake, as far as our presentation is concerned, to get through with it before 6 o'clock if we are not interrupted by too many questions.

Mr. KINCHELOE. Mr. Chairman, is it contemplated that there shall be some lawyer to discuss the constitutionality of these bills?

Mr. KELLOGG. I have made arrangements for a lawyer to file such a statement.

Mr. KINCHELOE. Well, I would like to have him come before the committee. I would like to ask him a few questions.

Mr. KELLOGG. Well, we will have a statement. The lawyer will be prepared to come before you at any time you want him. I feel sure as to that. If you wish the hearing closed up in that fashion, we shall be glad to do so this afternoon.

The CHAIRMAN. What is the pleasure of the committee? Will it accept this brief, or request the attorney to appear before the committee?

Mr. KINCHELOE. Yes; I would like to ask him a few questions.

Mr. KELLOGG. I said that he will eventually come before you. In the meantime he has already started the preparation of this brief.

The CHAIRMAN. I take it that is satisfactory. Then we are to understand that the attorney is to appear at a later date?

Mr. KELLOGG. Yes, sir; we shall be glad to have him at any time you desire.

STATEMENT OF MR. R. S. KELLOGG.

Mr. KELLOGG. We shall start, Mr. Chairman, by filing a statement by Mr. E. A. Sherman, discussing the question of the classification of Government lands outside of national forests. Mr. Sherman has such a statement prepared and he will put that in.

We have a statement by Mr. Dana upon the question of forest investigations, dealing particularly with forest experiment stations, that Mr. McLaughlin wanted to ask about. Mr. Dana will file that statement.

We have a brief statement by Mr. A. L. Osborn, representing the Northern Hemlock & Hardwood Manufacturers Association and the Michigan Hardwood Manufacturers Association. Mr. Osborn was suddenly taken ill a day or two before he was to start for Washington and was unable to be here, and he has sent this statement. We have a statement indorsing the proposed legislation by the Union League Club, of Chicago, which was brought here by Mr. Hall, who was a witness yesterday.

I have a statement by Mr. Taylor, president of the American Wood Preservers' Association, who was here yesterday but was unable to stay over today, which he asked me to leave with you.

We have here compiled for your information a statement correctly written out and certified to by myself as chairman of the National Forestry Program Committee of the indorsements the Snell bill has received.

You will remember that Mr. Gaskill said the other day that the bill had been indorsed in essential principles by the State foresters of 19 States, and he named them. They are not included in this statement. There is included in this statement 55 organizations of various character, ranging from the New York State Legislature—unanimously indorsing the Snell bill—to a large number of organizations of public character—chambers of commerce and others—55 organizations of that kind, and 17 State forestry associations, all properly listed, that have indorsed the essential principles of the Snell bill, which we would like to have go in the record.

Then we will have submitted to you in due time a brief upon the question of the constitutional authority for the expenditure of Federal funds in cooperative fire prevention and the purchase of national forest land outside the watersheds of navigable streams.

Mr. TINCHER. Is there some lawyer that believes that it is constitutional, that you know of?

Mr. KELLOGG. There are a good many lawyers who believe that.

Mr. KINCHELOE. You said that he will file a brief on that later, and the lawyer will also come before the committee.

Mr. Chairman, I would like to ask you what is going to be the rule with reference to holding meetings of this committee? We members of this committee would like to attend the sessions in the House, as many important matters are to be considered and we can not possibly keep up with our mail and attend these hearings if you expect to sit here all day, and it will be impossible to keep in touch with matters that are coming up constantly on the floor.

Mr. TINCHER. I am just like Mr. Kincheloe. I like to keep in touch with what is going on on the floor. They are putting a couple of million dollars back in that Post Office bill this afternoon and I would like to be there.

The CHAIRMAN. Of course, there are many things there that I am interested in also.

Mr. KINCHELOE. I haven't answered my mail for a week.

Mr. ALLEN. I will say now, Mr. Chairman, that I have just suggested to Mr. Kellogg that it would be quite as convenient for me to come back in the morning, if it will suit the convenience of the committee.

The CHAIRMAN. No; I think we would like to finish this up to-day.

Mr. KINCHELOE. I do not object to this going on this afternoon, but there is this sugar bill that is coming up, and a lot of other important matters, and I would like to keep in touch with what is going on in these committee hearings also. I have a lot of letters that I would like to answer. My constituents don't know anything about whether I am loafing, or anything else.

The CHAIRMAN. Well, we are all in the same fix.

Mr. KINCHELOE. As far as I am personally concerned, I am not going to attend these sessions any more except in the morning. Do we meet in the morning, Mr. Chairman?

The CHAIRMAN. Yes; we will meet in the morning and dispose of the matter then.

Mr. KINCHELOE. That will be perfectly satisfactory.

The CHAIRMAN. Without objection, those statements referred to by Mr. Kellogg will be inserted in the record.

(The statements referred to by Mr. Kellogg are printed in full, as follows:)

STATEMENT OF SAMUEL T. DANA, FOREST COMMISSIONER OF MAINE.

It is related that once upon a time the president of one of our State universities appealed to the State legislature for a small fund in aid of research. He presented his case to the committee on appropriations and was listened to with due courtesy. But when he went out, one of the legislators spoke up: "Say, what is research?" Another replied, "D—d if I know;" and a third proposed, "Let's lay it upon the table." There it has rested ever since.

Fortunately, those days are past. One can now approach a legislative committee in behalf of research with confidence that his reception will be not only intelligent but sympathetic. One of the beneficial results of the war was to awaken the country as a whole to the predominant part played by modern science, and to the fact that science must be based on research. Yet in the field of forestry progress has been slow in comparison with the complexity of the problems and the magnitude of the interests involved.

You all know that wood is one of our vital necessities; that it enters in a hundred ways into the daily activities of every individual and every business; that an adequate supply is almost as essential to our national welfare as is an adequate supply of food. You also know that we are not now taking steps to insure an adequate supply; that we are removing timber from the forests four and a half times as fast as it is growing; that our present course threatens decreased supplies, increased costs, and other nation-wide economic consequences of the most serious and unpleasant sort. But do you realize the character and the extent of the difficulties involved in meeting this situation?

These have to do not only with getting improved methods actually put into practice, but with determining just what those methods should be. If one could be given a free hand to do exactly as he pleased with the forests of this country, he would be unable to manage them with maximum efficiency for the simple reason that he would not know how. Our forests are far more complex and their management correspondingly more difficult than those of Europe. We have 495 tree species of which 125 are of commercial importance. No two of these are alike in their life histories, characteristics, and requirements. For the most part they grow not in pure but in mixed stands, and under widely varying conditions of soil and climate. The cultural difficulties introduced by the long period required for forests to mature, and the economic difficulties created by their location on the poorer and more inaccessible areas, still further complicate the problem of their management.

All of this does not mean that basic information as to how to handle our forests is totally lacking. On the contrary, the practice of forestry is based on a considerable and constantly growing body of facts and principles. Knowledge of these supplies the forester with tools which fit him for his task far better than one not similarly equipped, and which may even prove fairly satisfactory in our present stage of forest development. But as our forest area diminishes and our forest utilization becomes more intensive, we shall need more and more to resharpen the old tools and to replace them by new and more effective ones. Accepted facts and principles must be thoroughly tested and revised so far as necessary, while at the same time new facts and principles must be developed and applied. This information can be supplied only through well organized and comprehensive research by thoroughly trained investigators.

Enough has already been done to prove that such research is capable of paying big dividends. Forest investigations have been an integral part of the work of the Department of Agriculture ever since the creation of the Division of Forestry, and in 1908 a beginning was made in the establishment of a series of forest experiment stations similar in general character and scope to the agricultural experiment stations, but smaller in size. An interesting illustration of the results being secured by these stations is afforded by the discovery that the seed of Douglas fir is stored for a number of years in the surface soil and germinates readily when the forest is cut. Determination of this fact made it possible to secure natural reproduction in the Douglas fir forests of the Pacific Northwest by the simple method of clear cutting and burning the slash, and also emphasized the need for complete protection of the new stand from fire.

Forest research solved the difficult problem of how to plant successfully the arid sand plains of western Nebraska. To-day this formerly treeless region has flourishing young forests of pine from which Christmas trees are being cut.

The practicability of reclaiming the entire region with a forest growth suitable to meet local timber requirements has been completely demonstrated. Research has also shown how to plant in the dry yellow-pine region of the Southwest and in other parts of the national forests where the original tree growth has been destroyed by overgrazing, destructive lumbering, or fire. In many forest types it has developed improved methods of cutting in order to secure natural reproduction.

These results are well worth while. Taking the situation as a whole, however, the progress which has been made in these and other directions is insignificant in comparison with the problems still remaining to be solved. In the Northeast, for instance, we are still uncertain as to how the millions of acres of spruce, hardwood, and mixed forests should be cut, and as to what should be done with the slash resulting from cutting, in order to secure a fully stocked new stand of desirable species. Nor do we know how fast such a stand will grow and what yield may be expected from it in any given period.

In the Alleghenies we are faced by the unsolved problem of how to convert millions of acres of scrub oak, fire cherry, and other practically worthless trees into a highly productive forest such as the land once supported. In the Southeast we must learn how to reforest successfully the 30,000,000 acres of waste forest land, and of how to keep productive the remaining twenty-three and a half million acres of virgin yellow pine forest. In California we must determine the exact effect of a forest cover on streamflow and erosion, and must develop more effective methods of retaining and extending the present cover.

These are but samples of the work that lies ahead. The list of urgent problems to which no answer at all, or at best very incomplete answers, are available could be lengthened almost indefinitely. To put it boldly, we have so far been merely puttering in a field which deserves and demands more adequate treatment.

We have now reached the point where it is essential to undertake the work on a larger scale. Whatever may be the outcome of the present discussion regarding the practice of forestry on private lands, it is certain that steps must be taken to see that these lands are so handled as to insure an adequate timber supply for the future. It is equally certain that more intensive management of the publicly owned forests will be an essential part of any comprehensive forest program. The inevitable result of these developments will be an insistent demand for facts which we do not now possess. When we come to place the bulk of our forest area under forest management, as we are bound to do, we shall need to add enormously to our present meager knowledge of how to manage them to best advantage.

The scientific basis for forestry can be established effectively only through systematic research by trained men. Results can also be achieved by this method more quickly and more cheaply than by administrative trial. The latter involves large areas and high costs, and progress is necessarily slow. In research, various methods can be tried out on a small scale, and the results analyzed by investigators who are on the ground to determine precisely what happens and why. Not only can large scale, costly mistakes be avoided, but the conclusions reached are based on facts, not opinions.

That research in the production of forest crops is as necessary and will pay fully as well as similar research in the production of agricultural crops can not be doubted. Eloquent testimony to the value of the latter is afforded by the fact that the Federal Government now spends some \$8,500,000 a year for the support of agricultural experiment stations and in other agricultural research. Our forest area is nearly as large as the area of improved farm lands, and our forest problems are certainly no less difficult or complex than our farm problems. Yet we are now spending only \$85,000 a year for research in the fields of forest protection and forest production, or exactly one one-hundredth of the amount spent in agricultural research.

Increasing recognition of the need for further activity in this direction is indicated by the provision in the Snell bill authorizing the appropriation of \$1,000,000 a year for research, which would presumably be divided equally between forest production and forest and wood utilization. It is also indicated by the fact that there are now pending in Congress bills providing for the establishment of six forest experiment stations in different parts of the country. In order to handle the work adequately there should be a well equipped forest experiment station manned by a staff of trained investigators in each of our 10 important forest regions. The \$500,000 a year contemplated by the Snell

bill for the establishment and maintenance of these stations, together with provision for supervision for a central laboratory, and for such general supplementary investigations as might be necessary, is certainly none too large to enable them to function effectively; nor is it large in comparison with the magnitude of the interests involved and the practical value of the results to be secured.

The long-time nature of the forest crop makes it imperative that an adequate program of forest research should be adopted at once. Results can not be secured overnight with a crop that requires from 40 to 100 years to reach maturity. It is therefore necessary to undertake without delay the study not only of those problems which are already acute but of those which will soon become so. The results, even under the most favorable conditions, will not be available before there is urgent need for them. Delay is dangerous. If forest research is to play the part which it can and should in laying the scientific foundation for the practical application in the woods of any comprehensive forestry policy, it must be undertaken both on an adequate scale and promptly.

Such research will have two main objects: (1) To supply the facts necessary to place our 150,000,000 acres of national forests, which are an asset of the highest importance to the entire country, on a sound business basis; and (2) to make possible the more effective management of the much larger area of privately owned forests. It can be handled to best advantage, as experience both here and abroad has proved, through the establishment of regional forest experiment stations. Investigations in wood utilization can be handled at a single centrally located forest-products laboratory, such as that now maintained by the Forest Service at Madison, Wis., since wood and other forest products can be brought to it for test and treatment. Investigations in forest production, on the other hand, must be located in the woods where the forests actually occur, although the fact that forest regions do not recognize State boundaries makes it unnecessary to have a forest experiment station in each State. Ten such stations located in our 10 important forest regions would serve as headquarters from which investigations covering forest conditions throughout the country could readily be conducted. Their prompt establishment is imperative.

STATEMENT OF A. L. OSBORN.

This presence will be on behalf of the Northern Hemlock and Hardwood Manufacturers' Association and the Michigan Hardwood Manufacturers' Association.

We approve of the resolutions adopted by the board of directors of the National Lumber Manufacturers' Association on December 1, 1921. We approve of the fundamental principles or thoughts that are embodied in the Snell bill. We believe there should be cooperation between the Federal Government, the State, and the owners of timberland that forest growth may be provided for posterity.

The growth of timber on lands not suitable to other profitable use should be brought about. Economically fire prevention is the 100 per cent solution of the problem of timber growth in our two States. Controlled burning of all debris being prohibitive in cost, fire lines, fire patrols, and fire prevention laws are practical means for reducing the destruction of young growth that will be of value if brought to maturity.

We invite cooperative National and State control of the fire problem and the problem of saving young growth on a basis of the added cost being shared by the beneficiaries; that is, the cost to the private timberland owner being based on the benefits that he will derive, the public to pay such share of the cost as will be justified by the benefits derived by the public.

We urge that there be written into the bill a provision that will establish along with other principles in the measure that no regulation shall be written by the Secretary of Agriculture that carried out by the timberland owner would deprecate the value of his property. We urge that there be placed in the measure before reported for passage such provisions as will definitely secure the timberland owner against the imposition of costs for which he shall not receive an equivalent return.

STATEMENT OF C. MARSHALL TAYLOR, PRESIDENT AMERICAN WOOD PRESERVERS' ASSOCIATION.

You doubtless have had your personal observations of the growing shortage in the supply of wood confirmed by what you have heard in the past two days from those best informed on the situation. The foresters tell us that three-fourths of our original timberland has been cut over. There would be no cause for concern over that fact if the remaining one-fourth would meet our needs, but we are estimated to be cutting out our remaining stock nearly five times as fast as it is adding to itself by growth. Since the indefinite continuation of such a state of affairs means inevitable disaster to the country, it goes without saying that Congress is bound soon to evolve whatever legislation may be necessary to ultimately provide a continuous supply of the wood needed in the United States through improved practices in forest protection, utilization, and planting. The cooperation of the National, State, and private landowners contemplated in the Snell bill would assure the desired result, in time.

The time required to recover from our past recklessness presents a problem which has only one solution we can contemplate with satisfaction—that is, to make one tree serve where we have been using two. Substitutes for wood will probably reduce the per capita drain on our forest resources to some extent, but the growth of our country will not let this lessen the total demands, which so far exceed our annual growth.

A way in which effective contribution can at once be made toward lessening the drain on our forest resources and thereby giving existing and new forests a chance to develop annual yields equaling our annual demands is in the preservative treatment of wood to resist decay, insects, and marine borers. The annual loss of unprotected timber due to the causes given has never been calculated closely, but doubtless equals the amount of standing timber destroyed by forest fires.

Wood preserving is an art which began with the ancients, and has been practiced whenever and wherever woods lasting long without treatment have been scarce or expensive. Its growth in the United States can be traced statistically only as far back as 1860, though records of work done commercially start in 1848.

The American growth in wood preserving has been rapid. From three plants in 1860, treating 50,000 ties, the industry has developed to 112 plants, treating 45,000,000 ties, in 1920. Data regarding materials other than ties are available only since 1909, when the total was 75,000,000 cubic feet, compared with 173,000,000 cubic feet in 1920.

At least 90 per cent of the wood preserving done is for railroads. They can do more and are steadily increasing their use of treated wood, but there are other consumers of wood who can contribute toward making our forests go further, if they would lengthen the life of their wood by preservative treatment. With its service period increased two to five times, depending on the kind of wood and use, each treated bridge timber, mine timber, pile, post, tie, etc., would count effectively in giving our forests a chance to catch up with our needs.

A large part of the increase in the use of treated wood during the past 20 years is due to the educational work of the Forest Service in the United States Department of Agriculture. The Forest Service has urged consumers to treat wood where decay is a factor in its service and has studied ways and means for getting the results desired. It can continue to further progress along these lines if it has the funds for studies in improved methods for treating wood in its varied forms for varied uses so as to economically prolong its life. New preservatives should be investigated and better ways of using existing ones sought. The scientific research involved in making the preservative treatment of wood most effective is lessening the annual drain on our forests can best be handled by a balanced organization such as exists in the Forest Products Laboratory at Madison, Wis., and consequently the American Wood Preservers' Association indorses section 4 of the Snell bill, which provides for the Secretary of Agriculture to investigate and to cooperate with the industry in experiments and tests of the preservative treatment of wood.

The wood-preserving industry will itself work out problems concerning the art in which it is engaged, but the efforts of its individual concerns will be scattered and desultory. They will lack the concentrated application of the technical knowledge of wood structure and of chemistry to be had at the Forest

Products Laboratory. Besides, any results obtained and advocated by wood preservers might be questioned by wood consumers. The same results reached by the work of a Government institution devoted to public service would be accepted promptly. And promptness is essential if we are to treat enough wood to avoid the inconvenience of a shortage during the 50 years required to make our supply sufficient to sustain our needs.

So legislation covering a national forest policy could not be considered complete if it did not include provisions for investigation of economical ways and means for the effective preservative treatment of wood, as in section 4 of the Snell bill.

STATEMENT IN REGARD TO A FORESTRY POLICY FOR THE UNITED STATES SUBMITTED
BY THE UNION LEAGUE CLUB OF CHICAGO.

The Union League Club of Chicago, in harmony with its steadfast policy of furthering forest conservation, which policy has been further developed during 1921, makes through its public affairs committee the following statement of its position in regard to a forestry policy for the United States:

The Union League Club stands for a broad and effective plan of forest conservation throughout the United States, including full protection to the standing forests from fire, insects, and diseases; the harvesting of timber crops by such methods, while fair with respect to the interests of timber operators and the public, will nevertheless insure the reproduction of the forests on lands not adapted to farming; the reforestation as rapidly as possible of the non-farming lands made wholly or partially idle through fire damage or methods of logging practiced thereon; the most complete utilization, in logging operations and in the industries, of wood and all other products of the forests; and the extension as rapidly as possible of national forests and State forests, as well as forests owned by smaller subdivisions of the public, believing that under such public ownership more intensive measures of forestry suitable to the needs of the country may be introduced and made permanent.

It recognizes the forestry undertaking to be of such size and of such permanence as to demand for its success a policy laid down in carefully worked out legislation, and involving the cooperative and balanced effort of the Federal Government, the States, and individual landowners.

Of legislation now pending in Congress it regards the Capper bill (S. 1455) as failing to meet the requirements of the country in furnishing a practical plan of forest conservation and as being mainly an unwise plan designed to exercise Government control over an industry. It opposes that bill. It regards the Snell and McCormick bills (R. R. 129 and S. 1869) as being based upon right principles and as having for their aim the laying down of a fair and workable policy of forestry for the country. It urges that the Federal Government take the leadership in establishing such a policy through enactment by Congress without delay of legislation based on principles and plan of these measures.

Recognizing that forestry and agriculture are closely related industries, equally concerned with the production of crops from the soil, each reaching to every portion of the country and both being of vital interest to thousands of individual landowners, it holds that the Federal Forest Service should permanently remain in the United States Department of Agriculture with such enlargement of that department as may be necessary to accommodate the broad program of forestry, for the sake of the national interests, must soon be adopted.

Adopted by the public affairs committee January 3, 1922.

J. V. NORCROSS,
Chairman Public Affairs Committee.
GEO. T. BUCKINGHAM,
President Union League.

INDORSEMENT OF SNELL BILL—STATEMENT SUBMITTED BY R. S. KELLOGG, CHAIR-
MAN OF NATIONAL FORESTRY PROGRAM COMMITTEE.

THE COMMITTEE ON AGRICULTURE,
House of Representatives, Washington, D. C.

GENTLEMEN: In addition to the indorsements recorded with your committee by Mr. Gaskill, speaking for the State foresters of 19 States, who approves the policies of the Snell bill, this committee wishes to file at this time with the

Committee on Agriculture the record of other indorsements which have been given this measure. Some of them have, undoubtedly, been called to your attention directly by the organizations involved.

In addition to these, many other organizations have indorsed the principles of Federal Government with the States and private owners, as proposed by H. R. 129, although they do not agree entirely with the text of the measure as now before you.

Among these organizations are: Society of American Foresters, Concatenated Order of Hoo-Hoo, Seattle Chamber of Commerce, and Empire State Forest Products Association.

Organizations indorsing the Snell bill are: National Lumber Manufacturers' Association; American Paper and Pulp Association; American Forestry Association; American Newspaper Publishers' Association; Western Forestry and Conservation Association; United Typothetae of America; Florida Lumber and Naval Stores Association; California Forest Protective Association; National Box Manufacturers' Association; Eastern Paper Board Manufacturers' Association; National Paper Trade Association; Retail Lumber Dealers' Association of the State of New York; American Wood Preservers' Association; North Carolina Pine Box & Shook Manufacturers' Association; Pittsburgh Flood Commission; Union League Club, Chicago; West Coast Lumbermen's Association; National Paper Box Manufacturers' Association; Eastern Shook & Wooden Box Manufacturers' Association; Michigan State Farm Bureau; National Fire Marshals' Association (particularly fire-prevention feature); Natural History Club of New York; Northern Chautauqua Fish and Game Club; California Redwood Association; Community Club, Newton, Mass.; executive committee National Implement & Vehicle Manufacturers' Association; Illinois Federation of Women's Clubs; Lumber Dealers' Association of Connecticut; National Association of Employing Lithographers; Newton, Mass., Federation of Women's Clubs; New Hampshire Daughters of the American Revolution; New York City Federation of Women's Clubs; New York State Legislature; Ohio College of Agriculture (faculty and students, 300 signatures); Southern Lumber Exporters' Association; Western Pine Manufacturers' Association; Optimist Club, Columbus, Ohio; Engineers' Club, Columbus, Ohio; New York Bird & Tree Club; Utah Academy of Sciences; New York Builders & Traders' Clubs.

Chambers of commerce: Pittsburgh, Pa.; Springfield, Mass.; Bangor, Me.; Boston, Mass. (specifying that size of appropriations be left to judgment of Congress).

Rotary clubs: New York City; Battle Creek, Mich.; Milwaukee, Wis.; Colorado Springs, Colo.; Syracuse, N. Y.; Manchester, N. H.; Detroit, Mich.

State forestry Associations: New York, New Hampshire, North Carolina, Louisiana, Maine, Minnesota, Colorado, Maryland, Ohio, Indiana, Tennessee, Kentucky, Texas, Connecticut, California, Michigan, Wisconsin.

Sincerely, yours,

R. S. KELLOGG, *Chairman.*

Mr. KELLOGG. Then the first part of the summing up statement in behalf of the proponents of this legislation will be given by Mr. E. T. Allen, of Portland, Oreg.

The CHAIRMAN. We will be pleased to hear Mr. Allen.

STATEMENT OF MR. E. T. ALLEN, PORTLAND, OREG.

Mr. ALLEN. Speaking for the Western Forestry and Conservation Association, I shall speak for the West entirely. That region has been discussed here a great deal as the one which needs watching the most, because it is where the timber is. I think there has been some misunderstanding as to the testimony of the previous witnesses. I shall deny some statements which have been made.

The Western Forestry and Conservation Association, which I represent, is a sort of a league or alliance of protective organizations in Montana, Idaho, Washington, Oregon, and California working very closely with the State and Government authorities. In fact, it is often called the triple alliance of these three agencies, but as far as I can I shall try to describe the private end of its work.

We protect about 35,000,000 acres of land, toward which there is contribution from about 18,000,000 acres of private lands, and we are doing this in coopera-

tion with the States and the Government. This past year we did so at an expense to private owners of a half million dollars, toward which we had assistance from the State and Government of about \$175,000. In other words, we possibly paid about three-fourths of it. In protecting 35,000,000 acres we had only about 20,000 acres of commercial timberland burned over and about 31,000 acres of second growth burned over. The per cent of loss is so small it could not be expressed in decimals.

After this little introduction of whom I represent, to show that it is the second largest forestry organization of the United States and second only to the Federal Forest Service, I pass on now for a moment again to the general problem.

We are not here asking for regulation. The point is simply that there seems to be a sentiment asking for some sort of forest policy, and we were invited by the Forest Service to cooperate in indorsing one. We were quite glad to do so, and have approved the Snell bill, which is the bill, I understand, expressing very closely the beliefs of Col. Greeley. We are not asking either for any Federal money to help us do our own job. We are willing to take care of our own work. The only reason we ask any Federal money is that if certain things are to be called for by the public, we think the public should pay a part of the bills.

We look at it in this way: There is enough forest-growing area, if properly managed and protected, to go a long way toward settling the whole question. Some is in private ownership; some is State and some Federal. Nobody knows exactly how much land should be kept growing forests to supply the country's needs, but we know it should be more than is being so kept. Nobody knows what the ownership of that land is going to be eventually. We can only look to history and see that every country develops knowledge of the quantity of forest land which it is necessary for that country to keep producing forests, and that part is finally occupied by the private owner, part by the State, and part by the Nation.

It works out about this way: The economic stage of the country becomes one in which there is a profit in growing timber. The virgin supply goes. The lumber business, in order to perpetuate itself, wants timber and begins to take an interest in forestry. At the same time it takes that interest the public takes an interest also, and makes conditions under which the private owner can do a certain amount of forest growing. But he never wants to do as much as the country needs. Then the State, having an interest in maintaining its industry and pay rolls, its markets for its crops, its water supply, etc., begins to take over a certain amount of the land by purchase or otherwise. But still there is not enough forest growing to satisfy the whole public demand, and then the Nation takes a part.

Nobody knows to-day the proportion that perpetual forest production is going to take as between the Nation, the State, and the private owner, because it is an economic question as to how it will pay each in the long run. But we do know that while that problem is being settled the land involved would be growing trees if they were not burned up. So we think the urgent problem is not to settle who is going to own it eventually but to see that production is assured while gradually we are determining this ultimate ownership. If you could determine here that the Federal Government could buy so much for a national forest, or the State should buy so much, you could not get the money from the taxpayer immediately to do it. It must be a process of slow acquisition. In the meantime you want it all kept as well as possible. For that reason, the fire problem—keeping the stuff growing that is there now—is more urgent than planting young stuff, because you have already got the start. It is there; it will be usable much sooner.

It is an unfortunate thing that the idea of regulation has grown up so that we involuntarily think of it as one of the biggest things in the forest problem. You know these mental efficiency experts have word association tests to show the speed with which one's mind works. We have got so in this country that when you say "forestry" somebody immediately says "regulation." It is not necessarily the first thing, but rather the last thing, although no doubt it is coming to some extent. I object to the forecasting of regulation first and spending years and years talking about it before we see what we can do without it.

For example, go back to the West. By accident the Federal Government owned lots of land there in the national forests, and the States owned a great

deal of land, and the lumbermen owned a great deal of land. The fire problem was a very serious one. We began by each protecting his own. It soon proved this did not pay, so we began to cooperate in fire protection, and we built up cooperative machinery for this work, by which, as I told you, our private organizations spend from a half million to a million dollars a year in cooperation with the Government and the State. I am speaking of the lands outside of the national forests entirely.

In the building up of this cooperative machinery we got acquainted, and the suspicions that we had of each other, which exist when you are dealing with institutions rather than individuals, disappeared very largely, so that we could talk everything over. There were just as many difficulties and just as many chances for selfishness and just as many technical problems in dealing with this fire question as there will be in the cutting questions or any other related to forestry. Some people don't think so, but it is an absolute fact. Yet we got together on the fire question. Then came the other questions of forestry. Foresters came out to our country with Old World ideas, but we had our feet under the same table, so we came up and the foresters came down until we all reached practical ground. To-day when you go across from the commercial cutting into the Federal cutting, often you can not tell where you cross the line. That is not the idea you got from testimony here to-day saying that the great necessity is to prevent the devastation of the still uncut timber by regulation.

I will speak of the largest resource we have in the West, which is Douglas fir—three-quarters of what we now cut out there and probably one-fifth of all you are cutting in the Nation to-day. It is the big timber operation you should scrutinize. If devastation is bad, that is where it is bad, and it will get worse. But here is what the Forestry Service itself says in an official report:

"Douglas fir type: It is fortunate that common logging practice in this type conforms in its essential features with approved silvicultural methods. In simple terms, it consists of clean cutting followed by slash burning. Utilization has improved greatly in recent years. Although timber of inferior species is often not cut, it is believed that utilization in this respect, as well as of broken material and conky timber, is on the whole as close as economical conditions permit. Requirements of national forest sales are little more stringent than the best logging practice usually follows."

Another type, our western pine, is a little more difficult, but we are now studying that jointly and arriving at a very close agreement on that also. So we see little in forestry legislation to scare us, except where ignorance of the true situation may lead somebody to do something uncalled for or to spread prejudicial reports that will inflame the public mind. We are not afraid of competent foresters who work in the West.

We hope for fire protection particularly out of this bill. We are less interested in the purchase or tree-planting sections. With us, trees grow without planting. We are interested in the section which provides for the research work. Why? Because we want the Government to come out and see the facts and prove them, so that it is not our evidence here, but what you all know all about it, that settles the final policy.

It is easy but unfair to judge people by what they did in the past. It would be easy for lumbermen to tie all forestry failures to the public, because they have been equally careless and indifferent. But the situation out West has changed. The industry has reached its last stand. It has not only old trees but second growth and restocking land to utilize, costly to carry. One way is better use by encouraging secondary wood-working industries. They will not come out and settle with us if they know they are going to be stranded. So we want to have something that warrants them in coming and warrants them in staying.

It did not take us long to find out that fire ran from one class of timber to another, and it was just as essential to protect the second growth as it was the first growth. Now, later, we have seen that it is necessary to protect the young growth for its own sake; partly because we want to educate the public to that idea; partly because our land is there with this already on it; partly because we know that the public is going to insist on it. We know that we can not leave it to our neighbors, the State, and the Government, unless we cooperate with them. So, in the States of Oregon and Washington, Idaho and California we have extended our cooperative system of fire protection, to take in all forest land, regardless of ownership, regardless of character.

It has been said here, rather carelessly, I think, that the people out west have little forestry sentiment and consequently lumbermen control legislation.

The fact is that we are growing more trees than any of the other States; not because we plant them, but because God plants them. They come up like weeds. But we protect them. We have compulsory patrol laws which compel all lumbermen to protect all of their land. We have laws obliging the lumbermen to make men follow their locomotives, keep screens on their donkey engines, and all of that sort of thing. The lumberman is very closely regulated.

In Oregon and in Washington, which are the two States that probably most of the criticism we have heard is directed at, the Federal Forest Service says we are 72 to 75 per cent perfect in fire protection. The lumberman is paying 70 to 75 per cent of the cost of this. The other one-quarter is being borne by the State and the Government. We apply our protective machinery to take care of all of this territory. A bad year comes and with it comes a tremendous lot of fire fighting. It costs 25 to 30 cents an acre, oftentimes. In that year the State does not come up and the Government does not come up, because their appropriation has been made the year before, so the lumberman has to hold the sack. He does, and meets the need. He is willing to do that within reason, but as the industry grows less, the second growth area becomes greater. If you looked down from an airplane over that country 20 or 30 years ago, it would have been a green forest with little islands of clearing. As logging goes on it becomes more and more a restocking forest. It is becoming a tremendous burden for us to carry this load—to go 30 or 40 miles to put out fires where we are not interested because the compulsory patrol law obliges us to.

The protection of this second growth is of great interest to the public. The public is the beneficiary, consequently we think there should be some system by which the respective beneficiaries should pay according to their benefit. We admit that up to this stage of the game we are the chief benefactors, and we are now paying three-quarters of the whole thing, but as time goes on, our selfish interest will be less and the interest of the public will be more. We think the fair way would be for us to pay about half of it and the Government one-quarter and the State one-quarter; but we haven't got there yet. You are only paying 5 to 10 per cent and we are paying 75 per cent.

I do not think the Federal Government ought to pay too big a share of it, but some of it always, because the States that produce no timber get a direct benefit. If they want the benefits, they should pay part.

Why is a million dollars specified in this bill? I understand it is because at present you can not pay more than that with justice, because the States and the private owners are not doing their whole share. How far is it liable to take you? I shouldn't think more than about \$2,000,000, because I think it is generally admitted that, taking all these millions of acres of restocked lands, if they should be protected for about 3 cents an acre, you would get a total cost of something like \$8,000,000. I do not believe that the Government ought to pay more than about one-fourth of that. Some say one-third.

It so happens that in our region fire has always played a great part in forest reproduction. Most of the trees will reproduce better if there is a fire first to let the sunlight in. The seed is there, stored in the soil. Consequently the foresters there depend little on seed trees or selective cutting. They say, "Clean it all off and burn it over once before the seed in the ground starts to sprout." That is why this Federal report says that the Government system is about the same as ours. There is no sense at all in sitting here wondering how you are going to regulate the cutting of these trees when they would not let you do it if they had the law.

There are, of course, other problems. We believe they also will be solved by getting all agencies together in a local study of local conditions. Find out what any necessary work is going to cost in each region and work out the fair allocation of it. Let the lumberman pay his full share. Let the State pay its full share for the benefit it gets. Then the Nation must get some benefit as a whole or it would not be asking for this policy, and pay its share also. Try to find that out by cooperation and experiment. Why we favor this bill rather than the Capper bill is because we think you will get further when you do things that way than you do by conflict and by irritation.

The Capper bill seems to me rather a curious bill to be proposed to an agricultural committee, because it is predicated on the theory that the majority has the right to tell the minority to raise some commodity for them. We do not raise much corn out in our country. We might get together with some other Northern States and say that as we have to have corn and have a majority of votes over the corn States we will have a law which will compel the farmer to raise corn to the fullest efficiency. If he does it all right, we will

only tax him 5 cents a bushel. If he don't do it that way, we will tax him \$5 a bushel. Then we go further than that, as we heard the Capper bill would not apply back East, where the forests are gone. To be logical, the same thing must apply with our corn law. If the farmer has quit raising corn now and has gone to dairying, we will let him out, but if he happens to be still growing corn and has good, rich land he is the fellow to go after. I do not think, even if it were constitutional, we would get very far.

In closing I want to deny absolutely the charges that we are devastating our timber, because we are not. The West is the most effectively reforesting part of the United States to-day. We do plead for a fair division of the fire costs, and the research work which we believe will help you to get this big picture of how much land in the country ought to be kept in forests and where it is and what ought to be done to it. I do not think that information exists to-day.

There is one question, Mr. Chairman, that you asked the other day, which I failed to answer. I did not understand you. I have the figures here now showing the yield of fir in our territory. As you know, Douglas fir is the largest type out there. It shows that in about 40 years you can get about 12,000 feet to the acre if you are assuming a 12-inch tree as merchantable, used to about 8 inches in the top. You are going to let it grow probably 50 years, because under 50 years it is too small and over 80 years it is too expensive to hold it with land worth \$5 an acre, taxes costing 10 cents an acre, interest 6 per cent compounded, it would come out at a cost of about \$6.20 per thousand, at 60 years, to grow fir. If your annual carrying costs were 30 cents it would be \$9.25 a thousand. The interest rate is a tremendous factor, because as it gets bigger it doubles up so fast. If you carry it to 80 years, that same timber, with that same 10 cents and that same \$5, at 6 per cent, you would have to get \$12.45 a thousand out of it. With annual costs 30 cents, you must get \$18.60. So, when you get along up to about 80 years it looks hopeless. That is why you do well to help this distant region where land is cheap and you can get your crop in about 40 or 50 years. The Federal taxpayer gets more for his dollar if he invests that dollar where trees grow quickly and densely than if he puts it where it takes 90 or 100 years to grow a lesser crop.

The CHAIRMAN. How many thousand do you figure to the acre?

Mr. ALLEN. At 40 years 12,000 feet of Douglas fir; at 50 years, 28,000; at 60 years, 41,000; at 70 years, 51,700; at 80 years, 61,000. This means good fir land.

The CHAIRMAN. But 80 years it would cost \$250 an acre, wouldn't it, at compound interest?

Mr. ALLEN. It might very easily, sir. I don't know. I can not figure those things out in my head, but I am assuming that you are going to get 60,000 feet off of it.

The CHAIRMAN. You have the figures there. Will that give the information we desire?

Mr. ALLEN. I have exactly that information.

The CHAIRMAN. But I was anticipating this question being asked on the floor, if this bill gets on the floor, and we should be prepared to answer the question.

Mr. ALLEN. I didn't think of that. I thought we were coming here to talk the general principles of this proposition.

The CHAIRMAN. It occurs to me that possibly the States might exempt their lands from taxation. That eliminates the question of taxation. Then about the matter of carrying charges, that might be a matter of patriotism, and all that would be necessary to take into consideration would be the investment and the interest on the investment; I was trying to see if it was possible to work out a plan for reforestation.

Mr. ALLEN. As far as our country goes, you don't need a plan, because it is all forest if we can keep the fire out. Sixty or 80 per cent of it is reforesting now, but that is an accident. That has happened because the timber owner still has that land and he doesn't know what to do with it. If he lets it revert for taxes he does not gain anything. They just tax his timber more. He does not sell it, because there is nobody to sell it to. He thinks it looks better to keep it green. When the tax gatherer comes and begins to figure the expectation value, then it will be another matter.

The CHAIRMAN. Then offer it for taxes. If there is no bidder it goes to the county and the county owns it. There is no tax collected and then it is a question of whether the county could afford to carry it on in that way or not.

Mr. KELLOGG. I am sure, Mr. Chairman, that Mr. Allen would be glad to have some of these figures put into very definite shape and submit them to you.

The CHAIRMAN. Yes; I think that would be of value to the committee.

Mr. ALLEN. There is just one other thought in connection with the Capper bill, referring to the arguments you heard this morning that the farmer uses one-half of the lumber. If you undertake to regulate to bring about the growing of trees without regard to taxation or costs, of course it does increase the cost. Now, either the lumberman is not going to do it; is going to quit and go out of business, in which case you don't get the lumber; or else he is going to be able to pass the cost along. Now, it is not always easy to do that. The farmers are not finding it easy to pass on the costs of their products. But suppose lumbermen did pass the cost on and the farmer is using half of the lumber; then the cost of regulation will be borne one-half by the farmers of this country.

That is all I have to say, Mr. Chairman, except to ask that the record include the recent forestry resolutions of the Western Forestry and Conservation Association, showing our position as to Federal and State legislation. Also to ask that my testimony to-day be considered only supplemental to my more careful statement at last winter's hearing.

The CHAIRMAN. Well, we thank you very much.

(The resolutions are as follows:)

RESOLUTIONS OF WESTERN FORESTRY AND CONSERVATION ASSOCIATION.

SAN FRANCISCO, December 16, 1921.

This meeting represented the ownership and protection of most of the forest area of Montana, Idaho, Washington, Oregon, and California, containing about half the Nation's supply. The resolutions express the overwhelming majority recommendation of the Pacific coast on the important current subject of public forest policy.

FEDERAL FOREST LEGISLATION.

This conference of the forest interests of the five Pacific coast forest States representing lumber and timber organizations as well as forestry agencies unanimously approves the cooperation of Federal, State, and private interests in formulating and carrying out a farseeing and comprehensive national forest policy under the principles embodied in the Snell-McCormick bill which as we interpret them contemplate:

(a) Mutual effort by private, State, and Federal agencies fully recognizing the rights and necessities of each and sharing equitably in responsibility, cost, and benefit.

(b) Safeguard against impractical statutory regulations by providing that methods shall conform to regional conditions and needs, both forest and economic, as determined by joint regional study and experience and as modified hereafter by time and change.

(c) That the Federal Government seeks less to dictate local policies as a condition of its cooperation than to encourage and assure wise local action for the good of all and to bear its proper share of responsibility for this and for the cost thereof.

We recognize both public and private responsibility for prompt and sincere steps toward the ends mentioned and urge support of this bill in its present form or as it may be modified better to secure such ends. Particularly we recommend, as of earliest importance, its features for extension to all permanent forest land of the adequate fire prevention which must underlie all forestry effort and for the extension by purchase and exchange of public ownership of forest land.

STATE FOREST LEGISLATION.

Again emphasizing both public and private responsibility for forest perpetuation under conditions assuring equity and mutual benefit and under constitutional safeguards of all men's rights we believe that to the extent these require any regulation of either industry or public it is the function of State legislation to consider after due hearing of all interested and competent agencies such problems as:

(1) Organized protection of all forest land from fire with owners as well as public compelled to bear a fair share of the cost.

(2) Regulations for the suppression of fire which bear as rigidly on the hazards created by lumbermen as upon those created by the public.

(3) The disposal to the extent necessary of dangerous lumbering débris.

(4) Any further steps necessary for adequate forest perpetuation of which the cost is equitably borne by private and public beneficiaries according to their respective benefits.

Further we urge State ownership and management of considerable forest land, the taxation of forests conducive to the best permanent use of the portion remaining in private ownership, State cooperation with all agencies in forest protection, the framing and administration of forest laws through non-political bodies representing all who are competent and concerned, and in general the adoption of progressive State policies which reassure the Nation as a whole and warrant its cooperation in these policies without apprehension and conflicting Federal policy. To all which ends forest industry should sincerely contribute.

STATEMENT OF MR. E. S. KELLOGG, CHAIRMAN NATIONAL FORESTRY PROGRAM COMMITTEE.

Mr. KELLOGG. I notice that you gentlemen like to have definite figures, and I have some in mind that I should be very glad to have you put down, in order to give a clearer idea of the magnitude of the problem. In the first place, you can put down, as is shown by the report under Senate resolution 311, that the total annual requirement for wood of every kind in the United States, including what is destroyed by fire, is 28,000,000,000 cubic feet per year.

We also know that the present total acreage of land in the United States suitable for producing timber permanently does not exceed 460,000,000 acres, and it may eventually be not more than 400,000,000 acres.

It is a simple matter to divide that 28,000,000,000 by 400,000,000 or 460,000,000. If you do so, you will find that the amount of wood annually used for all purposes in this country is equivalent to some 50 or 60 cubic feet per year per acre.

That is the extent of the annual requirement for timber in this country. We are not using any more timber than the country needs. I do not need to go into that question at all, as to the necessity for timber, or what it has meant in the development of the country or what it will mean in the future maintenance of the existing scale of living in this country, but that very clearly indicates the necessity for the production of somewhere near 50 or 60 cubic feet of wood per acre per year. That is the basic requirement.

Now, we also know that in the properly managed forests of Europe, which have been under forest management for a longer time than any others of record, that the average annual growth of timber in those forests does not exceed 50 or 60 cubic feet of wood per acre per year. These are matters of fact.

The problem, therefore, Mr. Chairman, is to devise some means whereby we can get all of our timberland in this country—land that is fit for no other purpose—to produce wood on the scale on which wood is produced in other countries, and which can be produced here on an equal scale, because we have just as good forest land and we have just as good, if not better, native forest species as any other country in the world.

Now, the second thing in setting up the magnitude of this problem that your committee has to deal with is this:

That of the forest area of the United States that we have been talking about, only about 30 per cent is in public ownership, either national forests or State holdings—only about 30 per cent of this whole area. That is also a matter of fact. Therefore we have nearly 70 per cent of this permanent forest area privately owned, and no matter how far you go—and you are going a good deal further than you have so far in acquiring land for national forests under the Weeks Act and the extensions thereof—there is no likelihood, as I see it, and I don't know as it is desirable, that more than 50 per cent of the permanent forest area of the United States should get into public holdings. So you have now to deal with the problem of how you are going to get timber continuously produced on all of our forest land, which sets up at once the importance of why we must take measures that will encourage production of timber on the privately owned land, which, as far as we can see, will never be less than 50 per cent of our total forest area.

These are definite facts. There is no question but what these are the basic requirements of the problem that this committee is giving consideration to.

In presenting this legislation to you, we have set up certain fundamental principles that we feel must be met if you are to work out a solution of this

problem, and we believe that in the course of time you are going to work it out, because this is the only place we can get it worked out. There are certain principles you must set up just as we have set them before ourselves in deciding what this policy should be.

The first of these principles is that the policy adopted shall be adequate and practicable to produce the quantity of timber that the country must have. That is absolutely fundamental.

The second principal—and it is as fundamental as the other—is that this policy shall be just to all interests concerned; just treatment of these 400 or 450 million acres—20 per cent of the entire area of the Nation.

The third principle—because that is what kind of a country we live in—is that this policy shall be, in addition to being adequate and practicable and just, that it shall be acceptable to the majority of the people of the country.

Now, I do not think you can or wish to escape consideration of these three principles in proposing a solution of this problem, and if you do exclude them, you will not have given the right solution. That has been our viewpoint in presenting this proposed legislation to you.

The underlying purpose of this proposed legislation, as has been said here for the last four days—and I want to reiterate it again, because I can not make it too strong—is Federal leadership and cooperation with the States and the timberland owners to secure continuous forest production on this 460 million acres of land. That is the underlying purpose and I maintain that it has been abundantly sustained by the great preponderance of the evidence put before you; and that cooperation is the only feasible principle upon which this problem can be solved.

It is a principle that is absolutely tried and tested and demonstrated to be sound. It is the principle, as you know, Mr. Chairman, from your own personal experience, upon which has been based the development of the agriculture of this country—Federal leadership and cooperation with the States and the land owners, in increasing the productivity of the farms of this country; in increasing the number of bushels of wheat, corn, and other crops per acre; in the development of the great system of agricultural college; in the development of agricultural experiment stations in every State; in the development of the Federal highway system; in the development of the Federal vocational educational plan—all in cooperation with the States.

We have not proposed one single new principle to you. We have proposed a principle to you that has been tried and tested since 1860 in the development of the agricultural problems of this country, and we come to you, as an agricultural committee, asking for the further solution of the agricultural problem on these same sound fundamental principles. We would like to have you bear that in mind in the consideration of the bill that you have before you.

We say that this bill offers you a policy—offers you a way out in the solution of this problem. Here is what it provides for: It is necessary that it should provide for these three things:

It provides for the protection of the present supply. That is the first essential, absolutely the first essential. We do not care who comes before you and says that something else is more important, we know that when you get down to rock-bottom fact, you will find that the most pressing problem is to protect what we have right now. Fire must be checked. That is the biggest part of the problem, and you can not escape it.

The second part of the problem is to devise the best possible utilization of the present supply, because every time you make a stick of timber go further or last longer or be worked up into more products than has been the case before, you have increased the length of that supply of timber. So, the second part of the problem provides for a study and determination of better methods of utilization.

The third part of the problem is production of the future supply. That is provided for through forest planting and methods of cooperation with the States and landowners to make forest land continuously productive.

So we say that these three things are covered in this plan that we have set before you. We know perfectly well that during the past four days there has been a good deal of confusion of thought in this committee because this bill carries so many things in it. I will take my full share of responsibility for having that number of items in one bill, because all of the things in it are essential to the solution of this problem, and we did not want to come before you with any partial solution. We wanted to round it out, and that is the reason why all of these things are in the bill. You take it section by section and you

will see that every item has its proper place in the working out of the problem.

The alternative that has been presented to you, and apparently the only one that can be presented to you, is an entirely one-sided suggestion of direct mandatory control from Washington over the cutting of timber on the privately owned forest land of the United States that still bears a supply of virgin timber.

Once more, Mr. Chairman, I shall ask you to use your pencil. Remember that we have 460,000,000 acres of forest land in this country; that we have to make it all productive or we shall not meet our needs for timber. Put down the fact that we have only 137,000,000 acres of virgin timber in this country in private ownership, and remembering that we have to make the whole 460,000,000 acres productive, I submit to you or to any other reasonable man that control of the way timber is cut on the remaining 137,000,000 acres will not solve the problem. It will not produce timber on the other 300,000,000 acres of land. It is more important that those acres be put to growing timber than it is as to what tree is cut and what is left on the 137,000,000 acres of virgin timber. So, as I say, the alternative plan that has been presented to you is only a partial solution. It is entirely one-sided. We do not need to go into the question, but there is also very grave doubt as to whether you have any such constitutional power or not. But the timber-cutting problem is only a part of the problem. It is of much less importance than the control of fire.

It has been conceded by everybody here that you have got to have some sort of a just system of taxation on forest lands in private ownership, and that it can only come through State action. You are powerless to touch it. The police power must be exercised to protect that same land from fire, and that again can only come through State action. So, we submit once more that we have presented to you the only feasible solution of the problem, which is that the three agencies must get together and work it out—the National Government, the States, and the timberland owners—and we do not believe that that statement can be gainsaid.

Now, here is another thing that I wish to submit to you: We have had a good many ideas brought up around this table. It has been said that the States are not making very much headway on this problem; that they are holding back; that they are not doing what they ought to do. We will grant that they have not done nearly as much as they ought to do. We all know it. It is a big problem. But we are making progress. We have made tremendous progress in the 21 years since I started in on this thing. I want to submit to you a press bulletin that went out from the Forest Service last August. It says to start with:

"Probably never in the history of this country has there been such marked interest in forest preservation by State legislators as at the present time, report officers of the Forest Service, United States Department of Agriculture. No less than 33 States have now provided for some sort of forest activities, and 25 of these share in the Federal cooperative forest protection fund, allotted to States maintaining an effective fire detection and suppression system. Two others have applied recently for such assistance. Public backing of the movement to preserve the remaining forests from destruction from fire and to put idle forest lands to work growing trees is becoming widespread, and the effect of the popular demand for action is shown clearly in the State laws passed this year."

Then it enumerates State by State what was done by the legislatures last winter in all of those States. I would like to put that bulletin in the record, Mr. Chairman.

The CHAIRMAN. Certainly. Without objection it is so ordered.

(The extract from the Agricultural Department bulletin follows:)

MARKED PROGRESS SHOWN IN STATE FORESTRY LEGISLATION.

Probably never in the history of this country has there been such marked interest in forest preservation by State legislators as at the present time, report officers of the Forest Service, United States Department of Agriculture. No less than 33 States have now provided for some sort of forestry activities, and 25 of these share in the Federal cooperative forest protection fund, allotted to States maintaining an effective fire detection and suppression system. Two others applied recently for such assistance. Public backing of the movement to preserve the remaining forests from destruction by fire and to put idle forest lands to work growing trees is becoming widespread, and the effects of the popular demand for action is shown clearly in the State laws passed this year.

Pennsylvania, under the direction of Gifford Pinchot, the new commissioner of forestry, leads all States in forest activities. The biennial appropriation passed by the legislature and approved by the governor carried \$1,870,000, an increase of \$863,300 over the appropriation of 1919; \$1,000,000 of the total is for fire protection. The legislature also passed an act empowering the Federal Government to acquire lands on the watersheds of navigable streams within the State, by purchase or condemnation, and to control and regulate such reserves.

The Minnesota legislature was more generous with the State forestry board than ever before. A total of \$275,500 for general forestry work was appropriated for the next two years, of which \$125,000 a year is for the fire protection. The last-named sum was augmented by an additional allotment of \$44,000 from the State board of relief. For the equipment of a flying field near the Twin Cities \$45,000 was voted. This provision was to meet the offer of the Federal Government to furnish the service of 12 planes if the necessary hangars and flying field were provided. While the primary purpose of this agreement is to supply aerial mail communication, the planes will be able also to render effective service in "spotting" forest fires.

In California, where there has been much favorable sentiment toward forestry for many years, the legislature voted a substantial increase in appropriation for the State board of forestry for the biennial period beginning July 1. For the prevention and suppression of fires \$75,000 was appropriated; for general administration, \$27,000; for a study of watershed areas, \$10,000; and to establish and maintain State forest nurseries \$35,000. The legislature also voted \$300,000 for the purchase of redwood timberland for park purposes along the State highway in Mendocino and Humboldt Counties, the area to be administered by the State board of forestry.

Other important State forestry legislation passed this year was as follows:

Bills for the compulsory teaching of fire prevention in public schools were passed by California, Rhode Island, and West Virginia. A similar measure was passed by the New York Legislature, but vetoed by the governor. New Jersey already has such a law.

Maine increased the annual tax on land within the forestry district from 1½ to 2½ mills on the dollar, the taxes thus collected to be used exclusively for protection from fire of the forests within the district, provided for the creation and management of State forests acquired by purchase or gift by the State forester, adopted improved means for controlling the disposal of lumbering slash and the encouragement of timberland owners to practice forestry on their lands through a concession in taxation.

Ohio passed a forest-fire law and appropriated \$5,000 a year for two years for the prevention and suppression of fires, also made an appropriation for the purchase of lands for State forests.

Tennessee passed a general forestry bill and appropriated \$10,000 for fire protection and \$7,500 for general forestry purposes.

North Carolina increased the State appropriation for forest protection from \$3,800 to \$9,000.

In Louisiana provision for State control of all natural resources, including forests, was provided for by constitutional convention held early this year.

In New Hampshire provisions were made for leaving seed trees on cut-over pine lands, for redistricting of the State for forest-fire purposes, and for compulsory forest fire patrol on large timberland holdings.

Connecticut provided for reorganizing the State forestry administration and protection work and for more liberal appropriations.

Several of the other State legislatures have also had forestry questions under consideration, which have made for progress even where, as in Florida, no definite legislative enactment took place.

The Georgia Legislature, now in session, has before it a bill providing for the appointment of a board to investigate the forest conditions of the State and to report legislation necessary to solve the forest problem. In order to arouse public interest in this important movement a meeting of the Southern Forestry Congress was held in Atlanta during the latter part of June, and attended by over 150 prominent men representing the most active forest interests in the Eastern and Southern States. At this conference it was shown that the lumber cut of Georgia has decreased 33½ per cent in the past 10 years while the production of turpentine and rosin has fallen off 75 per cent. In the opinion of foresters it will be only a few years before Georgia will take a place with the Carolinas as an insignificant producer of naval stores.

In only one State, West Virginia, was the forestry situation given anything like a setback. In that State in reorganizing the forest, game, and fish department forestry was at first entirely eliminated and then just before passage an optional provision was included in the fish and game bill by which the new commission can if it wishes expend not to exceed a fourth of its appropriations for forest protection.

Mr. KELLOGG. Now I want to call your attention, Mr. Chairman, to certain features of the two plans before Congress. One is the plan of compulsion—the mandatory plan, as was said time after time by the proponent of that plan. The other is the plan of cooperation, and I ask you to note this, that never in the history of the civilized world has it proved feasible over any period of time. Never in recorded history, as far as I am aware, has it proved possible permanently to maintain private capital in unproductive channels in order to produce commodities that the people thought they ought to have. Never has it proved feasible during any period of time to produce the commodities needed by a community through any kind of uneconomic legislation. I think you will agree with me that that is a correct statement, Mr. Chairman.

I want to cite you a little example. I live in New York State. A year ago last summer there was a tremendous hue and cry all over the State, as there was in a great many other States, on the question of the housing shortage, to the effect that people could not find places in which to live and that something had to be done about it. In the summer of 1920 the legislature of the State of New York was called in special session for one particular purpose stated, and when the session ended two or three days later it had passed laws fixing the amount of increase in rent that could be charged by the landlords of New York City; fixed the amount they were allowed to increase their rents. The bill was passed in two or three days, and it was signed by the governor immediately on passage. The legislature adjourned and went home. The newspapers carried big headlines to the effect that the housing shortage had been stopped; the problem had been solved.

Something was very definitely stopped. It was house building. There was no question but that it was an effective law, but it did not give the people more places to live in. The only way to reduce the price of anything is to increase the supply of that commodity. So in looking over the records I found that in the month of January, 1921, not one single building permit was issued on all the island of Manhattan to build a place in which a family could live; not a single one. There housing shortage was still on, and they had the law. So they began to see daylight and along in February, due to the passage of a new law by the State legislature, the New York City authorities began to issue permits for the building of places for people to live in, because over a certain period of years such places of certain character, not to exceed certain values, had been exempted from taxation. Now I want to read you this statement that I clipped from the New York Tribune on the 1st day of January this year:

"Home building in New York City in the 43 weeks since February 25, the day the board of estimates approved the tax-exemption ordinance, increased 413 per cent over the same period in 1920."

The item goes on through in a great deal of detail as to the number of places and their value and the fact that over 56,000 families are to be housed by the new buildings. I simply cite that as an illustration that you can bring out reports and pass laws and say what capital shall do until the cows come home, but that if you do not make it profitable for a private individual to grow timber in this country it will not be grown on private land.

So we answer those who say that the only way to get timber in this country is to compel the private owner to grow it. We say that you can cooperate with him; that you can lead him; that you can educate him; that you can make conditions such that he can get value out of timber if he plants it and brings it to maturity. That is why you raise crops on your farms.

Then I want to call your attention to this: We have submitted to you a long list of the organizations, of State forestry associations, of State foresters, and of groups of almost every character that are supporting this legislation after they have studied it—not the exact wording but the basic principle of Federal leadership and cooperation. There has been no indorsement (with the exception of one commission) presented to you for the alternative principle. No other indorsements.

The program set up by the Snell bill is opposed by a few radical foresters and a considerable number of very conservative lumbermen for obvious rea-

sons. It is supported by a majority of the foresters of the United States, by a majority of the National and State authorities that will have to do with its interpretation and execution if it is enacted. It is supported by Nation-wide public opinion, as evidenced in the scores of indorsements by all types of organizations that have been presented to you. So we say there is not only a request but a demand for the proposed solution of this problem.

Now, in closing I just want to allude to one or two more things. A definite charge was made at the hearing upon this same legislation last year that we are heading straight into a timber monopoly. I am not accepting that statement, but it was made to you, and also that this legislation that is proposed here, if it did anything, would increase the danger of that monopoly. I want you to consider this, that we are asking you to provide conditions under which 300,000,000 acres of land in the United States that is growing timber not at all now, or only indifferently, can be brought to full productivity, and I want to submit to you that that is the only possible way to avoid a monopoly—the only antidote for it, if there were one. The only antidote is to increase the supply of timber.

You, Mr. Chairman, brought out yourself time and time again that it is a great deal more important to you to have the supply of timber increased in Minnesota and Wisconsin than it is anywhere else on the face of the earth. You have exactly the right conception. If we increase the supply of timber and the possibility of growing it all over the country on the land that is suitable for it, we have a complete answer to any charge of monopoly. Our measure provides for doing that. So there does not need much more to be said on that subject.

Then the question comes up as to whether you are justified in reporting out legislation at this time that calls for a new expenditure of Government money. As I told you yesterday, the people who are backing this program are paying their full share of taxes and have been doing so for a good many years past. They sympathize just as much as anybody else with the effort that is being made for the first time in the nearly 133 years that we have had this present form of government to put the Government on a businesslike basis. We believe in it thoroughly, but we do know that unless we begin to make some small investment in the production of a future supply of timber we shall have to pay an exceedingly high rate for what we do get.

We are not asking you for an expense account. We are asking you for an increase in your investment account, because every dollar that you put into the forests of this country is an investment. It should not be regarded as an expenditure of the ordinary type that you have to write off in your profit and loss account. We are asking you to put a little more in your capital account than has been done before. We know absolutely from what has taken place up to this time that the longer it is put off the more eventually the National Government and the States will have to put into this project.

Let me state this one thing. It came up before the Committee on Appropriations last year. It was about 22 years ago that there first came before Congress a proposal to begin the acquirement of forest land in the southern Appalachians. Just about that time—I remember it very well—that land could have been bought, with a magnificent stand of hardwood timber on it, for an average of about \$5 or \$6 per acre—the entire thing, with all the timber. Congress put off and temporized and did nothing; investigated and appointed committees, and did things of that sort, until finally it started with a little beginning in 1911. The statement was made yesterday that the 2,000,000 acres that have been purchased since 1911 cost over \$6 per acre, and a very large proportion of that land, Mr. Chairman, had no merchantable timber on it when it was purchased. By those 10 years of delay, the Government lost the standing timber on nearly all of that land—perhaps the growth of 100 years. That is what it cost. So I say that if anybody urges that it is not wise to start an investment of this kind now, there is an answer in the way we have been penalized since 1900.

The CHAIRMAN. But was not the delay largely due to the lack of any definite plan?

Mr. KELLOGG. No, sir.

The CHAIRMAN. That has been the trouble before this committee. We have been making appropriations; we quarreled over this eradication of tuberculosis for years. We were asked to make appropriations with no definite plan. We simply sat down and said, "Whenever you give us a definite plan, we will give

"You all the money you want." We are giving millions now, and we are giving it freely. Just as soon as they mapped out a definite plan they never had any trouble with Congress. Now, we have a tremendous plan here. I think all of us appreciate the importance of the proposition. Undoubtedly we are approaching a shortage of lumber. Of course, it is of much concern to everybody, but some of us think we ought to have some definite plan to work on. We ought to know exactly what this money is to be used for.

Mr. KELLOGG. You should, absolutely.

The CHAIRMAN. I think we are getting it. We have been working hard to get it, and we have been getting information and will get more.

Mr. KELLOGG. If we have not given you enough, I hope you will call us back and make us do it over again.

The CHAIRMAN. I am not criticizing you at all.

Mr. KELLOGG. Oh, I understand, you did have a better plan presented to you in 1910, which you enacted in 1911, for the acquisition in the East—a better plan than that had been presented 10 or 12 years before; but it was not enough better to justify the loss of the timber on that area in that time. The plan was good enough in 1900 to warrant starting it, and it was not started.

So, I submit to-night, Mr. Chairman, that in response to your repeated demand for a policy we have submitted to you a policy in this Snell bill. This bill is an example itself of the manner which we say is the only possible way in which this problem can be worked out, because the Snell bill itself is the best example we have had in a long time of the cooperation of all parties in attempting a solution of a problem. The Snell bill is a compromise cooperative undertaking all the way through, because you see it has finally brought to its support the foresters, the timberland owners, a great many of them, the users of timber, and the public interest. They got around a table and worked out the bill, because they found that when they sat down together they could get a meeting of minds on the subject. So we say that the fact that we put this bill before you in this fashion is the best proof that we can give you that the problem can be worked out.

It is impossible for you to write into the bill the exact details of how timber shall be cut in one locality and left in another; how slash shall be handled in one locality and left in another. It is utterly impossible for that to be done. We are asking you to set up the machinery through which it can be discussed and worked out. That is what we submit the Snell bill does do.

I want also to say this: That the Snell bill, in accordance with the present procedure of Congress, does not and can not carry an appropriation in itself. It carries authorization by you to the Appropriations Committee to make appropriations within certain limits, and I want to say to you frankly, sympathizing, as we all do, in your desire to cut down expenditures, that we consider it more important that you should go over this thoroughly, and that you should finally report out a measure based upon the information that has been given to you that will start a solution of this problem than it is that the appropriations under it should start to-day or to-morrow or next year. We believe that the determination of the policy on the right line is much more important than whether the appropriations start now or next year. But we do ask, Mr. Chairman, in view of the situation of the country, that you will work out this problem in such fashion as seems to you best in view of the information that has been given to you, and that you will give us this chance to make a start upon a national forest policy of the kind that we absolutely have to have.

Now, Mr. Chairman, our cards are all on the table. That is the best we can say about the matter.

The CHAIRMAN. I desire to compliment you on making the candid statement that you have. I am very grateful to you. Now, what about the suggestion here that possibly the Western States might not accept or cooperate in this bill? You have come in contact with those people and you probably know more about it than any other witness here. Let us have your candid opinion about that.

Mr. KELLOGG. I am very glad to give it to you just exactly as I understand it. The best answer to the charge that has been made time and again that the Snell bill, in the first place, could not pass, and in the second place, that if it does pass it will not work, and so does not amount to anything—the best answer to that is that the Snell bill principle, as far as we can apply it under present legislation, is already working in the West. That is a plain matter of fact. I think it has been abundantly sustained by what Mr. Long said on the first day and by what Mr. Allen said to-day and by what Mr. Danaher and Mr. Taylor said also. They are actually doing things. They do get around a table

and discuss matters and they decide that something can be done and they go ahead and do it. Each one chips into the pot to pay for doing it. That is the best statement I can give you on that, Mr. Chairman. It does work.

The CHAIRMAN. Well, the question has been raised. I knew that you had knowledge of what the sentiment was in that section of the country. That is why I asked you.

Mr. KELLOGG. I do not mean to say that everybody everywhere is unanimously of the opinion that this is exactly the right thing, but we do say that the principle of cooperation and leadership is working and is producing results. We say that is the only way to work out these problems. Mr. Snell asked me to say that some time later, at your convenience, he will appear before the committee to make a final statement.

The CHAIRMAN. We would be very glad to have him do so. We thank you very much, Mr. Kellogg.

The committee now stands adjourned until 10 o'clock to-morrow morning.

(Whereupon, at 5 p. m., an adjournment was taken until 10 o'clock to-morrow morning, January 13, 1922.)

RESOLUTIONS PASSED BY THE NORTH CAROLINA FORESTRY ASSOCIATION AT WILMINGTON, N. C., JANUARY 27, 1922.

NATIONAL POLICY.

Whereas the continued prosperity of this Nation is dependent on the conservation and wise utilization of the forests; and

Whereas their perpetuation is threatened by the methods under which much of the forest is now handled; and

Whereas there are now before the Congress several very far-reaching measures dealing with the disposition, regulation, improvement, and management of the forests, both public and private; and

Whereas we desire to inform our representation in Congress what is the attitude of this association toward these measures.

Therefore we herewith express our corporate opinion of these national measures as follows:

(a) We strongly condemn the movement to transfer some or all of the activities of the Forest Service from the United States Department of Agriculture, where it has been most efficiently administered during the past 15 years, to the Department of the Interior.

(b) We heartily indorse the provisions of the several bills pending in Congress which provide for extending the scope of the work of the United States Forest Service and increasing the appropriation for the prevention of forest fires in cooperation with the various States as authorized under the Weeks law.

(c) We urge the early passage of legislation by Congress providing an adequate appropriation—not less than \$1,000,000—for the continuance of the purchase by the Federal Government under the Weeks law of forest lands for the protection of the headwaters of streams and as a help toward a solution of our future timber-supply problem.

(d) We congratulate the South and especially North Carolina on the establishment of the Southern Appalachian Forest Experiment Station at Asheville, and the Southern Forest Experiment Station at New Orleans; and we hereby respectfully urge Congress to increase the appropriations for their maintenance so that they can more quickly and more effectively study the many pressing problems which southern forestry is waiting to have solved.

We congratulate and extend thanks to the progressive members of the legislature of North Carolina, at the session of 1921, in the enactment of a State-wide stock law. This legislation will not only encourage the production of more and better live stock and make agriculture more prosperous, but will permit more intelligent and rapid reforestation of our denuded lands. We urge upon the governor, the judges, and solicitors of our courts, and particularly upon the intelligent and progressive class of our citizens, an impartial and rigid enforcement of the stock law to the end that the people of the entire State may participate in its benefits.

The legislature of 1921 enacted a most important law authorizing the several counties by appropriation to cooperate with the State and Federal

Governments in the protection of our forest areas. We urge the boards of commissioners of the several counties to take advantage of this law. No wiser investment of the public revenue can be made or one which will yield a larger dividend. We congratulate the people of those counties which have entered into this cooperative movement. Our remaining forests are amply worth protection.

As our forest lands contain mainly very young or very old trees, we therefore believe that the harvesting of mature timber should be so conducted as to leave uninjured the middle and smaller-sized trees. We urge that the present area of public forests, National, State, or municipal, be kept not only rigorously intact, but increased as rapidly and extensively as possible by purchase, gift, or exchange.

We firmly believe that instruction in forestry should be given in all our agricultural schools and colleges and State universities.

Resolved. That we hereby express our deep appreciation to the Wilmington Chamber of Commerce, the North Carolina Landowners' Association, the Wilmington Y. M. C. A., the press of Wilmington, and the courthouse and high-school officials for their kind cooperation and many courtesies extended to our association to make this meeting a success.

STATEMENT OF HON. HENRY E. HARDTNER, OF URANIA, I.A.

The growing of timber on denuded forest lands is no longer an experiment at Urania. We have 50,000 acres on which there is a complete stand of timber ranging from 1-year-old seedlings to 20-year-old saplings and 40-year-old trees. We have carefully watched our young forests until we know every advantage or disadvantage in the business of forestry. No natural reforestation can occur where land is skinned of every sapling, nor will reforestation take place where there are ample seed trees unless fires are absolutely prevented, especially for the first 10 years. There are other enemies, but they are insignificant.

After the White House conference of governors called by President Roosevelt, and which was presided over by our distinguished Gov. Blanchard, I commenced talking forest conservation. After a few years I decided that talk was cheap, but wouldn't grow forests, and I made up my mind to retire to my forest home, learn something about reforestation, do something, and then, if successful, I would again have the right to make speeches. I now have the goods—50,000 acres—open to inspection by anyone; but my comrade conservationists of 1906 who are also lumbermen and members of the American Forestry Association, are still talking and have never been known to plant a tree unless a camera was near by.

Up-to-date, common-sense forestry methods in connection with my lumber operations, together with cattle raising, enable me to grow timber at a cost that insures handsome returns from the business, and I am leaving my forests in as good condition as I found them. But, without the advantages and methods which I have adopted, I have prepared for cold, calculating masters of finance a table showing cost of growing trees, together with general observations on the forestry problems.

SOME COST FIGURES.

Cost of growing pine timber in Louisiana on denuded forest lands after the slash has been removed and sufficient number of seed trees left to insure natural reforestation, on a unit of 50,000 acres—40-year period:

Value of land at \$5 per acre, \$250,000; taxes, 15 per cent per acre per annum; supervision, 5 per cent per acre per annum; interest at 6 per cent, compounded; total cost, 40 years, \$4,117,500; timber produced, 10,000 feet per acre, 500,000,000 feet; cost per thousand feet, \$8.23, to which must be added severance taxes when the timber is cut; the value of stumpage 40 years hence may be \$10 to \$20 per thousand feet.

There may be 5,000 to 10,000 feet of timber grown to the acre instead of 10,000 feet, as I have it. There may not be enough seed trees, and seed would have to be planted. The cost of removal of slash might have to be considered. The tax might be increased, unless fixed by law for the full period. All these things must be considered. The value of seed trees left to each acre, 500 feet, would increase the initial investment on the land to \$8 per acre. On the other

hand, some returns might be had from raising cattle or selling forest products, such as poles, pulp wood, etc. All these things are indefinite, problematical. The cold figures point to \$8.23 per thousand feet, plus severance taxes under the most favorable conditions, as the cost for growing timber.

That is too much for a long-time investment—for one to pay interest, compound interest, taxes, supervision, for forty-odd years before returns come in. It is evident that the value of \$5 per acre for the land and 15 per cent per acre annual taxes is just twice as high as it should be. These forest lands, to be used for the purpose for which they are best adapted, should not have a value to exceed \$2.50 per acre—the land only to be taxed at that rate for the full 40-year period. The timber grown on the land should pay a yield or severance tax of 10 to 30 per cent on its stumpage value when cut. Tax exemptions are not advocated. A sane adjustment of taxation on forest lands is all that is needed as an encouragement to owners of forest lands to engage in this much-needed enterprise—forestation.

The deferred tax of \$1 to \$3 per thousand feet paid on the timber when cut and returns realized from the venture insure the Government double or treble the taxes than if these forest lands are left idle—a worthless waste. The Government—the people—can have forests if they want them. If individual effort is to be encouraged, then the individual must have the same advantages as the Government—no more, no less. We must have forests; we can not exist without them. If the people want complete Government ownership, it suits me. I favor complete Government supervision of all forests right now. The solution, as I see it, would be Government ownership of one-third or one-fourth of the forest lands in each State, with individuals or companies owning all the balance, with reasonable supervision by the Federal and State Governments of private forest lands.

To go into the business of growing trees, one must know that he can expect reasonable profits. "Woodman, spare that tree," sentiment must be forgotten. It has no place in modern forestry. Our country can not exist without forests. The Government—the people—must solve the problems. Lumbermen and owners of forest lands who think—and there are really very few who try to think—about reforestation can only offer suggestions or give the public the benefit of their experience.

STATE OF WASHINGTON, OFFICE OF GOVERNOR,
Olympia, January 9, 1922.

HON. JOHN W. SUMMERS, M. C.,
House of Representatives, Washington, D. C.

DEAR SIR: I am informed that Congress is now considering the Snell bill relating to forests, their protection, and reforestation. A close perusal of this bill has convinced me that many of its provisions are inimical to the best interests of the State of Washington. I don't like to see so much appropriated for reforestation and so little for the protection of the forests which we already have. Neither do I believe that the blanket authority over these appropriations granted to the Secretary of Agriculture is practical or a thing to be desired.

So closely do the opinions of State supervisor of forestry, Mr. Fred E. Pape, coincide with my own in this matter, that I am inclosing copies of correspondence between Mr. Pape and Mr. Alfred Gaskill, State forester of New Jersey, which explain more fully the reasons why I am convinced that you should oppose certain provisions of the bill.

Too careful consideration can not be given to all matters pertaining to our forest program. Few questions are of more importance to the State.

Sincerely, yours,

LOUIS F. HART, *Governor.*

STATE OF WASHINGTON,
DEPARTMENT OF CONSERVATION AND DEVELOPMENT,
Olympia, January 3, 1922.

MR. ALFRED GASKILL,
State Forester, Trenton, N. J.

DEAR SIR: In replying to your inquiry of December 21 relative to our attitude toward indorsing the Snell bill, I will endeavor to point to some of its provisions that are of vital concern to the taxpayers of this State, likewise to

other States having extensive national forests or other Federal reservations. I will also point to other provisions that should be of interest to the Nation.

EXTENSION OF NATIONAL FORESTS.

The resources and products of the forest are as essential to the upbuilding and maintenance of necessary public improvements, buildings and institutions of both State and county as are the products of the factory, farm, or mine. Therefore, any proposed law for extension of Federal reservations or for permanent retention of public lands or other property that does not carry an adequate appropriation to reimburse the State and counties for consequent loss of revenue should not be enacted.

The principle should be recognized that where valuable lands and resources are held in public ownership the taxing units wherein such property is situated are entitled to and should receive revenue therefrom on the same basis as from like property privately owned.

ESSENTIAL REQUIREMENTS.

Section 1: The law sets up no guide or standard by which the essential requirements may be determined, but instead it provides that the Federal authorities in cooperation with State officials, "or other suitable agencies," may determine the essential requirements for each forest region.

Does not this provision make possible the determination of the "essential requirements" for a State or for two or more States in the same region over the protest of State authorities and regardless of the requirements of present State laws, also regardless of the standard of protection being afforded by State and private interests to their forest lands. Might not the funds appropriated by this section be entirely withheld should State authorities consider such requirements onerous, unwise, or impractical.

WITHHOLDING COOPERATION AND BASIS FOR ALLOTING APPROPRIATIONS.

Section 2: It is clearly the purpose of this section to clothe the Secretary of Agriculture with such autocratic authority that appropriations made by Congress may be withheld from the States for no other reason than a mere difference of opinion on essential requirements determined, as provided in section 1, or for failure to enact recommended legislation or to comply with certain administrative practice, regardless of economical consideration. Finally, all of this may be done in total disregard of what the State has accomplished or is accomplishing in forest protection, forest conservation, or reforestation. This section is particularly objectionable and should not pass unamended.

There is no basis or standard provided in the law for allotting the appropriations. If the main purpose of the act is to protect and conserve our present stand of timber and grow another crop on cut-over lands, then the law should provide a definite standard for allotting funds. It should be based either on loss of revenue to State and counties on account of untaxed public property, or based on quantity of timber protected and adaptability of State or region for growing a new crop, giving due consideration to annual growth and yield per acre for a stated period.

An area basis would be unfair for the reason that there are millions of acres of barren mountain tops and desert lands which never have or never will produce commercial trees. From a forest-protection standpoint the only attention such areas require is to prevent fire spreading therefrom to forest lands which bear commercial or young-growth timber.

APPROPRIATIONS.

[Secs. 3, 4, 5, and 9.]

I can not pass these sections without comment and comparison of these appropriations with the appropriation in section 1, which is to carry out the main purpose, to wit, protection, conservation, and reforestation, for which only \$1,000,000 is appropriated.

The best-informed authorities, including the present Chief Forester of the United States and his predecessor, acknowledge that in the business of conserving timber and growing new forests fire protection constitutes from 70 to

90 per cent of our effort. Now, please note that \$6,000,000 is proposed to be appropriated under sections 3, 4, 5, and 9, much of which is to be expended for information already in the hands of State authorities and United States Forest Service, or for purposes nonessential to either forest growth or the utilization of forest products. If 75 per cent of our effort should be fire protection, would it not be a good business to reverse the above amounts, granting \$6,000,000 for protection and \$1,000,000 for investigations?

Particular attention is directed to the similarity of purpose for which the appropriations in sections 3 and 9 are to be used. If these sections are correctly understood the information gathered under section 3 would contain all that is sought for by section 9, it being merely a matter of segregating and assembling the data.

Sections 6, 7, and 8, providing for acquiring additional national forest land, have been partially dealt with in the opening paragraphs of this letter; it remains only to call attention to the unwise provisions for exchanging valuable merchantable timber, or giving assignable certificates, for practically valueless cut-over lands. We believe the Government is almost certain to get the worst of the bargain in such proposed trades or exchanges. It would be better to appraise and sell the timber in moderate quantities to the highest bidder and repurchase cut-over land when needed.

Furthermore, there is little likelihood of the great fire-killed and cut-over areas in the national forests being artificially reforested within the next 25 years; such being the case there is no immediate necessity for acquiring cut-over lands at this time.

If the provisions of section 8 are understood correctly the State would lose its 35 per cent of sale value of timber as provided under existing laws, and would also lose from its tax-producing property the additional lands acquired, thus sustaining a double loss. Western national forests should be reduced rather than increased, and the Eastern and Middle States should bear their own cost of reforesting and repurchasing forest land. In fact, the entire national forest scheme seems to be a wholesale appropriation of western resources to rebuild the wasted heritage of other States.

There is no reliable information or trustworthy experiments to give assurance that forests grown under present or proposed plans will not cost double, or even treble, the market value of stumpage 50, 75, or 100 years hence.

It must be remembered that substitutes have already displaced lumber for many uses, and there will be more and more substitutes as price of lumber advances, so that it is well to keep in mind that the cost of growing timber will be a large factor in the future use of it.

If we are to grow forests that will return to the Treasury the money expended in growing them, then public use of the forests for recreation must be either abandoned or so regulated that fires will not occur from such use. Also all frivolous or nonessential activities must be abandoned and the task undertaken and conducted as a prudent man would conduct his business, ever watchful that expenditures do not exceed probable income.

I inclose clipping from the Seattle Times of January 1 in relation to the report of the president of the West Coast Lumbermen's Association to the State tax investigating committee. This should be of interest to the committee that reports on the Snell bill.

Very truly, yours,

F. E. PAPE, *State Supervisor of Forestry.*

STATEMENT BY E. A. SHERMAN, ASSOCIATE FORESTER, ON SECTIONS 9, 10, AND 11.

The purpose of these sections is to make available for timber production upon a practical and permanent basis forest lands now under the control of the Government, but either neglected entirely or without plans making them a permanent part of our timber-producing budget.

The preceding sections of this measure are designed to prevent the devastation of privately owned timberlands either by fire or improper use, to increase the production of timber by reforestation on private and Government lands, to bring about a more nearly complete utilization of wood products and a better understanding of their possibilities, and to secure comprehensive information regarding our wood supply, its source and possibilities. These sections are designed to make the use of our remaining public lands and other Government-controlled lands conform with the purposes of the first eight sections of the bill. *Congress has taken away from the President the power of creating national*

forests from the public domain within the important public-land States, excepting in Alaska, Nevada, Utah, Arizona, and New Mexico. The President is without authority to establish national forests in Washington, Oregon, California, Idaho, Montana, Wyoming, and Colorado. Within these last-named States forests can only be created by special act of Congress. The Sixty-seventh Congress has already enacted two laws making additions to national forests in these States, and 15 additional bills for additions are now pending. These measures only cover the projects in which the local public have some special interest. The executive department is without authority to act.

This restriction was placed upon the executive authority because of a fear that there would be included within the national forests in these States lands more valuable for agriculture or some other purpose than for timber production and watershed protection. I apprehend that in the face of any such possibility it would be impossible to persuade Congress to remove that inhibition. This measure, however, would secure the desired results without any possibility of lands being included within national forests improperly. This measure provides that there shall first be a classification by the Department of Agriculture of all lands remaining in public ownership or control which are found to be chiefly valuable for timber production and watershed protection. Second, for the approval of such classification by the National Forest Reservation Commission. The membership of this commission consists of the Secretary of War, Secretary of the Interior, Secretary of Agriculture, two Senators, and two Representatives. If the classification is approved by the commission, the lands are then withdrawn subject to further disposition. If found by the President to be suitable for inclusion in national forests, he is empowered to provide for such inclusion by formal proclamation. This differs from the procedure followed under the law authorizing the establishment of national forests by direct presidential proclamation. In fact, under that law large bodies of land were included in the national forests with a provision for the entry of any lands found to be chiefly valuable for agriculture, whereas under this provision the agricultural lands would first be segregated and only the nonagricultural lands included in the reservation.

To completely cover the remaining unappropriated public lands and other lands under the control of the Government, suitable for timber production, will require considerable time and money. Disregarding the national forests, national parks, and other special forms of reservation, the United States owns or controls, in round numbers, approximately the following acreage of land in the continental United States, exclusive of Alaska:

	Acres.
Unreserved and unappropriated.....	190,000,000
For military reservations.....	490,000
For naval purposes.....	13,000
Revested or pending revestment.....	2,700,000
For Marine Hospital Service.....	28,000
Agricultural experiment stations.....	50,000
Indian purposes, allotted and unallotted.....	71,000,000
Total	264,281,000

Of the foregoing, it is roughly estimated that about 11,000,000 acres are chiefly valuable for timber production and watershed protection, and that this land contains between 75,000,000,000 and 100,000,000,000 feet of valuable timber, worth to-day probably \$150,000,000. It is believed that these areas can be located, examined, cruised, and appraised at an average cost of not to exceed 10 cents per acre. Owing to their scattered location, this would be impossible excepting for the fact that a considerable amount of information is already available, and this, of course, will be used to the extent that it is found to be dependable. This work should first deal with the unreserved, unappropriated public lands. The entire project should be completed within five years. Many difficult problems involving questions of taxation and local equities will have to be worked out. The rights of the Indians must be safeguarded, and the full value of the reservations secured to them in every case where tribal lands are involved. Each reservation will be a problem in itself; and the solution of these problems is necessarily left by this measure to be worked out by the National Forest Reservation Commission in primary form before submission to Congress for final action. In short, this measure provides for no steps in the dark, but does provide a medium for making progress and throwing light upon the additional steps which must be taken in the future.

STATEMENT OF CONGRESSMAN SNELL.

Mr. Chairman and members of the committee: In closing the presentation of testimony upon the forestry situation in the United States with respect to bill H. R. 129, I want to pay my compliments to the Committee on Agriculture for the earnest manner in which they have studied this question during these hearings.

Never to my knowledge has the forestry problem of the country been given such an exhaustive study by a committee of Congress, and it is creditable to the members of this committee that they have been willing to make such an intensive survey of the situation. The critical state of our forests, one of our greatest natural resources, has fully warranted this presentation and attention; and I hope that from the mass of testimony which has been presented the members of this committee will be able to work out a national policy which will stand as the Nation's forest program for many years to come.

The testimony has clearly shown that there is no essential difference of opinion on the part of those who testified on most phases of the measure under consideration. While the study of the problem confronting the Nation has been most intensive, I want in closing to once more call to your attention the fact that you have heard from all types of the public in relation to this problem. You have heard from the timberland owners, from those who fabricate the forest products, and from the consumers. And in these three groups you have heard from those with widely different viewpoints.

From the standpoint of the timberland owners you have heard from the manufacturers of paper and of lumber, two widely different groups, though both use the products of the forest. You have heard from the fabricators through an organization representing widely different types of conversion of the raw material; and in the group of consumers you have heard the voice of the common public through the American Forestry Association, the American Newspaper Publishers' Association, and the technical foresters.

And the unanimity on most parts of the measure has been most striking. While there have been slight differences as to phraseology, the main points and ideas of all the witnesses have been identical, and even on the controversial points the preponderance of sentiment has been overwhelming in favor of the cooperation of the Federal and State Governments with the private owners of timberlands. Any proposal to lay down a system of Federal control, ignoring the States, can hardly be considered seriously by Americans any more than we could permit a system of import duties levied by the States against the products of each other.

A few things must not be overlooked in a summing up of the testimony presented:

First. A comprehensive national policy to meet future needs of the Nation must be developed.

Second. The question of fire prevention is vital. Our national-forest fire loss runs from \$20,000,000 to \$25,000,000 a year. An appropriation of \$1,000,000 a year by the Nation, as its share of the cost of preventing this huge loss, is a small sum to pay for insurance.

Third. The acquisition of additional land for national forests at the headwaters of navigable streams, if not in other vital regions, is not an expense but an investment, for such purchases are already paying a good interest return on the original cost in cash, as well as the intangible profits received by the Nation in the prevention of floods and the other assets of a national forest.

Fourth. To devise means for adequate utilization of our forest products is worth all that is asked by this bill. If one tree can be made to provide the raw material formerly secured from two, one mature tree is saved for future requirements.

Fifth. A business man before undertaking any change of policy, or advance steps, takes stock of his property. To-day we do not know what our timber resources are. A survey is essential, and while it should be made at the earliest possible moment, we already know that the crisis is so close as to require a beginning on the other parts of the program while this survey is being made, to give us better data for future determination of the extent to which a national policy shall be developed.

We have presented to you the need for action and the information to enable you to act intelligently. The reporting of a bill to give the Nation this essential legislation now rests with you, and I am sure we will get something that will be of lasting benefit to the future generations of Americans.



LIBRARY OF CONGRESS



0 014 132 743 4

